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E N

PL

IN M

FLORA LONDINENSIS;

OR,

PLATES AND DESCRIPTIONS

OF SUCH

PLANTS

AS GROW WILD

IN THE

ENVIRONS OF LONDON:

WITH THEIR

PLACES OF GROWTH AND TIMES OF FLOWERING,

THEIR

Several NAMES, according to LINNÆUS, and other Authors:

WITH A PARTICULAR DESCRIPTION OF EACH

PLANT

IN LATIN AND ENGLISH.

TO WHICH ARE ADDED,

THEIR SEVERAL USES,

IN MEDICINE, AGRICULTURE, RURAL ŒCONOMY, AND OTHER ARTS.

BY WILLIAM CURTIS.

VOL. II.

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1798.

TO

JOHN COAKLEY LETTSOM, M.D.

THE FRIEND OF HUMANITY,

THE PATRON OF SCIENCE,

THIS SECOND VOLUME

OF THE

FLORA LONDINENSIS,

IS MOST RESPECTFULLY

INSCRIBED,

BY

HIS MUCH OBLIGED FRIEND,

WILLIAM CURTIS.

INDEX I.

In which the Plants contained in the fourth Faſciculus are arranged according to the Syſtem of LINNÆUS.

	Latin Name.	*Claſs and Order.*
1	Hippuris vulgaris	MONANDRIA *Monogynia.*
2	Veronica montana	DIANDRIA *Monogynia.*
3	Valeriana dioica	TRIANDRIA *Monogynia.*
4	Scirpus maritimus	TRIANDRIA *Digynia.*
5	Panicum viride	
6	Panicum verticillatum	
7	Panicum ſanguinale	
8	Panicum crus galli	
9	Eriophorum polyſtachion	
10	Eriophorum vaginatum	
11	Holcus lanatus	
12	Milium effuſum	
13	Scabioſa arvenſis	TETRANDRIA *Monogynia.*
14	Plantago media	
15	Aſperula odorata	
16	Cynogloſſum officinale	PENTANDRIA *Monogynia.*
17	Menyanthes trifoliata	
18	Symphytum officinale	
19	Vinca major	
20	Samolus valerandi	
21	Campanula rotundifolia	
22	Chironia Centaurium	PENTANDRIA *Digynia.*
23	Chenopodium hybridum	
24	Bunium Bulbocaſtanum	
25	Chærophyllum ſylveſtre	
26	Myoſurus minimus	PENTANDRIA *Polygynia.*
27	Peplis Portula	HEXANDRIA *Monogynia.*
28	Polygonum amphibium	OCTANDRIA *Digynia.*
29	Polygonum Convolvulus	OCTANDRIA *Trigynia.*
30	Silene anglica	DECANDRIA *Trigynia.*
31	Arenaria trinervia	
32	Arenaria ſerpyllifolia	
33	Sedum ſexangulare	DECANDRIA *Pentagynia.*
34	Spergula nodoſa	
35	Spergula ſaginoides	
36	Euphorbia exigua	DODECANDRIA *Trigynia.*
37	Clematis Vitalba	POLYANDRIA *Polygynia.*
38	Ranunculus repens	
39	Ranunculus hederaceus	
40	Galeobdolon Galeopſis	DIDYNAMIA *Gymnoſpermia.*
41	Stachys arvenſis	
42	Prunella vulgaris	
43	Scutellaria minor	
44	Orobanche major	DIDYNAMIA *Angioſpermia.*
45	Antirrhinum Orontium	TETRADYNAMIA *Siliquoſa.*
46	Raphanus Raphaniſtrum	
47	Turritis glabra	
48	Cardamine hirſuta	
49	Geranium pratenſe	MONADELPHIA *Decandria.*
50	Malva moſchata	MONADELPHIA *Polyandria.*
51	Trifolium glomeratum	DIADELPHIA *Decandria.*
52	Hypericum quadrangulum	POLYADELPHIA *Polyandria.*
53	Sonchus arvenſis	SYNGENESIA *Polygamia Æqualis.*
54	Hieracium Piloſella	
55	Arctium Lappa	
56	Cichorium Intybus	
57	Bidens tripartita	
58	Jaſione montana	SYNGENESIA *Monogamia.*
59	Ophrys ſpiralis	GYNANDRIA *Diandria.*
60	Carex riparia	MONŒCIA *Triandria.*
61	Carex acuta	
62	Carex gracilis	
63	Parietaria officinalis	POLYGAMIA *Monœcia.*
64	Equiſetum arvenſe	CRYPTOGAMIA *Filices.*
65	Bryum barbatum	CRYPTOGAMIA *Muſci.*
66	Phaſcum acaulon	
67	Phaſcum ſubulatum	
68	Jungermannia complanata	
69	Agaricus procerus	CRYPTOGAMIA *Fungi.*
70	Agaricus velutipes	
71	Agaricus floccoſus	
72	Boletus lucidus	
73	Phallus caninus	

INDEX II.

Latin Names of the Plants in the fourth Faſciculus, arranged Alphabetically.

	Plate
Aſperula odorata	15
Arenaria trinervia	31
Arenaria ſerpyllifolia	32
Antirrhinum Orontium	45
Arctium Lappa	55
Agaricus procerus	69
Agaricus velutipes	70
Agaricus floccoſus	71
Bunium Bulbocaſtanum	24
Bidens tripartita	57
Bryum barbatum	65
Boletus lucidus	72
Cynogloſſum officinale	16
Campanula rotundifolia	21
Chironia Centaurium	22
Chenopodium hybridum	23
Chærophyllum ſylveſtre	25
Clematis Vitalba	37
Cardamine hirſuta	48
Cichorium Intybus	56
Carex riparia	60
Carex acuta	61
Carex gracilis	62
Eriophorum polyſtachion	9
Eriophorum vaginatum	10
Equiſetum arvenſe	64
Euphorbia exigua	36
Geranium pratenſe	49
Galeobdolon Galeopſis	40
Holcus lanatus	11
Hypericum quadrangulum	52
Hieracium Piloſella	54
Hippuris vulgaris	1
Jaſione montana	58
Jungermannia complanata	68
Milium effuſum	12
Menyanthes trifoliata	17
Myoſurus minimus	26
Malva moſchata	50
Ophrys ſpiralis	59
Orobanche major	44
Panicum viride	5
Panicum verticillatum	6
Panicum ſanguinale	7
Panicum Crus galli	8
Plantago media	14
Peplis Portula	27
Polygonum amphibium	28
Polygonum Convolvulus	29
Prunella vulgaris	42
Parietaria officinalis	63
Phaſcum acaulon	66
Phaſcum ſubulatum	67
Phallus caninus	73
Ranunculus repens	38
Ranunculus hederaceus	39
Raphanus Raphaniſtrum	46
Scirpus maritimus	4
Scabioſa arvenſis	13
Symphytum officinale	18
Samolus valerandi	20
Silene anglica	30
Spergula nodoſa	34
Spergula ſaginoides	35
Sedum ſexangulare	33
Stachys arvenſis	41
Scutellaria minor	43
Sonchus arvenſis	53
Turritis glabra	47
Trifolium glomeratum	51
Veronica montana	2
Valeriana dioica	3
Vinca major	19

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Engliſh Names of the Plants in the fourth Faſciculus, arranged Alphabetically.

	Plate
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BRYUM bearded	65
BUCKWHEAT climbing	29
BUCKBEAN	17
BROOM-RAPE common	44
BELL-FLOWER heath	21
BOLETUS lacquer'd	72
BURDOCK	55
CAREX great or common	60
CAREX acute	61
CAREX ſlender-ſpiked	62
CLUB-RUSH round-rooted or ſea	4
COW-PARSLY common	25
CHICKWEED plantain-leaved	31
CHICKWEED thyme-leaved	32
CATCH-FLY Engliſh	30
CRANES-BILL crowfoot	49
CROWFOOT ivy-leaved	39
CROWFOOT creeping	38
CENTAURY	22
COMFREY	18
COTTON-GRASS many-headed	9
COTTON-GRASS ſingle-headed	10
EARTH-NUT	24
GOOSE-FOOT thorn-apple-leaved	23
HOUNDS-TONGUE	16
HOODED-WILLOW-HERB ſmall	43
HORSE-TAIL corn	64
HEMP-AGRIMONY trifid	57
JUNGERMANNIA flat	68
LADIES-SMOCK hairy	48
LADIES-TRACES	59
MOUSE-TAIL	26
MOUSE-EAR	54
MARES-TAIL	1
MUSHROOM ſhaggy	71
MUSHROOM velvet-ſtalked	70
MUSHROOM tall	69
MILLET-GRASS wood	12
MALLOW muſk	50
MORELL red-headed	73
PURSLANE water	27
PHASCUM common	66
PHASCUM heath	67
PANIC-GRASS green	5
PANIC-GRASS rough	6
PANIC-GRASS looſe	8
PANIC-GRASS cocksfoot	7
PLANTAIN hoary	14
PERSICARIA amphibious	28
PERRYWINKLE great	19
PELLITORY of the wall	63
RADISH wild	46
SPEEDWELL mountain	2
ST. JOHN'S-WORT ſquare-ſtalked	52
SELFHEAL	42
SOFT-GRASS meadow	11
SNAP-DRAGON ſmall	45
SCABIOUS field	13
SOWTHISTLE corn	53
SPURRY knotted	34
SPURRY pearlwort	35
STACHYS corn	41
SPURGE ſmall	36
SHEEPS-SCABIOUS hairy	58
SUCCORY blue	56
STONECROP inſipid	33
TOWER-MUSTARD ſmooth	47
TRAVELLERS-JOY	37
TREFOIL round-headed	51
VALERIAN marſh	3
WOODRUFF	15
WATER-PIMPERNEL round-leaved	20

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In which the LINNÆAN Names of the Plants contained in the 1ſt, 2d, and 3d Faſciculi, are arranged Alphabetically.

		Faſc.
10	Anthoxanthum odoratum	1
12	Aira aquatica	1
13	——— præcox	3
22	Alopecurus myoſuroides (agreſtis Lin.)	2
23	Avena flaveſcens	3
24	——— elatior	3
36	Anagallis arvenſis	1
37	——— tenella	3
48	Æthuſa Cynapium	1
54	Alſine media	1
92	Agroſtema Githago	2
106	Adonis autumnalis	2
113	Anemone nemoroſa	1
121	Ajuga reptans	1
128	Antirrhinum Cymbalaria	3
129	——— Elatine	1
131	——— ſpurium	2
130	——— Linaria	2
136	Arabis Thaliana	1
189	Arum maculatum	2
196	Atriplex haſtata	2
197	Aſplenium Scolopendrium	1
212	Agaricus ovatus	2
213	——— fimetarius	2
214	——— glutinoſus	3
215	——— plicatilis	3
216	——— oſtreatus	3
78	Adoxa Moſchatellina	2
19	Bromus mollis	1
20	——— ſterilis	1
21	——— hirſutus	1
79	Butomus umbellatus	2
123	Betonica officinalis	2
137	Braſſica muralis	3
170	Bidens cernua	3
175	Bellis perennis	1
200	Bryum ſcoparium	1
201	——— undulatum	1
202	——— hornum	1
203	——— truncatulum	2
204	——— viridulum	2
205	——— ſubulatum	3
206	——— argenteum	3
207	——— ceſpititium	3
9	Circæa lutetiana	3
32	Centunculus minimus	3
38	Convolvulus ſepium	1
39	——— arvenſis	2
47	Conium maculatum	1
50	Chenopodium album	2
51	——— viride	2
52	——— polyſpermum	2
53	——— Bonus Henricus	3
83	Chryſoſplenium oppoſitifolium	2
93	Ceraſtium ſemidecandrium	2
94	——— viſcoſum	2
95	——— vulgatum	2
96	——— aquaticum	1
114	Caltha paluſtris	1
138	Cardamine amara	3
139	——— pratenſis	3
171	Carduus marianus	3
190	Carex pendula	3
26	Dipſacus piloſus	1
27	——— ſylveſtris	3
132	Digitalis purpurea	1
133	Draba verna	1
04	Epilobium hirſutum	2
65	——— villoſum	2
66	——— tetragonum	2
67	——— anguſtifolium	2
68	——— montanum	3
69	Erica tetralix	1

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In which the Engliſh Names of the Plants are arranged Alphabetically.

		Faſc.
12	Aira water	1
113	Anemone wood	2
52	Allſeed	2
104	Avens	2
125	All-heal	3
19	Brome-Graſs ſoft	1
21	——— hairy ſtalk'd	2
20	——— barren	1
200	Bryum broom	1
201	——— curled	1
202	——— ſwan's neck	1
203	——— brown	2
204	——— green	2
205	——— awl-ſhaped	3
206	——— ſilvery	3
207	——— matted	3
156	Birds-foot-Trefoil common	2
71	Biſtort common	2
176	Butterbur	1
121	Bugle common	2
6	Brook-lime	2
191	Burnet	2
123	Betony wood	3
25	Blinks	3
141	Crane's-bill Hemlock-leav'd	1
142	——— ſtinking or herb Robert	1
143	——— doves-foot common	2
144	——— mountain	3
128	Cymbalaria ivy-leav'd	1
54	Chickweed common	1
38	Convolvulus large white	1
39	——— field	2
102	Cinquefoil common	1
107	Crowfoot round-rooted	1
109	——— upright meadow	1
108	——— pale-leav'd	2
111	——— wood	2
112	——— celery leav'd	2
189	Cuckow-pint	2
177	Colts-foot	2
90	Campion red	2
28	Cleavers common	2
92	Cockle	3
190	Carex pendulous	3
158	Claver	3
155	Clover Dutch	3
192	Cats-tail broad-leav'd	3
193	——— narrow-leav'd	3
175	Daiſy common	1
133	Draba vernal	1
116	Dead-Nettle purple	1
118	——— white	2
165	Dandelion common	1
60	Dock curl'd	2
62	——— ſharp pointed	3
61	——— broad-leav'd	3
63	——— narrow-leav'd	3
31	Devil's-bit	3
127	Eye-bright red	2
173	Erigeron purple	1
9	Enchanters Nightſhade common	3
55	Elder dwarf	3
56	Flax purging	3
79	Flowering Ruſh	1
48	Fools-parſley	1
129	Fluellin ſharp pointed	1
131	——— round-leav'd	3
132	Foxglove purple	1
18	Feſcue graſs flote	1
147	Fumitory common	2
22	Foxtail-graſs field	2
57	Fritillary common	3
195	Frog-bit	3

——— cinerea

70	—— cinerea	2
98	Euphorbia Peplus	1
99	—— Helioſcopia	1
127	Euphraſia Odontites	1
135	Eryſimum Alliaria	2
149	Ervum hirſutum	1
150	—— tetraſpermum	1
173	Erigeron acre	1
18	Feſtuca fluitans	1
57	Fritillaria Meleagris	3
101	Fragaria ſterilis	3
147	Fumaria officinalis	2
28	Galium Aparine	2
104	Geum urbanum	2
122	Glechoma hederacea	2
141	Geranium cicutarium	1
142	—— robertianum	1
143	—— molle	2
144	—— pyrenaicum	3
35	Hottonia paluſtris	1
43	Hedera Helix	1
58	Hyacinthus non ſcriptus	2
160	Hypericum pulchrum	1
161	—— perforatum	1
162	—— hirſutum	3
163	—— humifuſum	3
164	—— Androſæmum	3
168	Hypochæris radicata	3
169	—— glabra	3
195	Hydrocharis Morſus Ranæ	3
208	Hypnum proliferum	1
209	—— ſericeum	2
210	—— purum	3
217	Hydnum auriſcalpium	3
11	Iris Pſeudacorus	3
59	Juncus campeſtris	2
178	Inula dyſenterica	3
179	—— pulicaria	3
8	Lycopus europæus	3
42	Lonicera Periclymenum	3
45	Lyſimachia Nummularia	3
56	Linum catharticum	1
90	Lychnis dioica	2
91	—— Flos cuculi	1
97	Lythrum Salicaria	3
116	Lamium purpureum	1
117	—— amplexicaule	2
118	—— album	2
156	Lotus corniculatus	2
159	Lathyrus pratenſis	3
165	Leontodon Taraxacum	1
166	Lapſana communis	1
25	Montia fontana	3
44	Myoſotis ſcorpioides	3
145	Malva ſylveſtris	2
146	—— rotundifolia	3
157	Medicago lupulina	2
158	—— arabica	3
194	Mercurialis perennis	2
89	Oxalis Acetoſella	2
148	Orobus tuberoſus	1
185	Ophrys apifera	1
186	—— ovata	3
187	Orchis maſcula	2
188	—— Morio	3
199	Oſmunda ſpicant	2
14	Poa annua	1
15	—— rigida	2
16	—— pratenſis	2
17	—— trivialis	2
29	Plantago lanceolata	2
30	—— major	2
102	Potentilla reptans	1
103	—— Anſerina	3
191	Poterium Sanguiſorba	2
198	Polypodium vulgare	1
71	Polygonum Biſtorta	1
72	—— Perſicaria	1
73	—— penſylvanicum	1
74	—— var: caul: macul:	1
75	—— Hydropiper	1
76	—— aviculare	1
77	—— minus	1
211	Polytrichum ſubrotundum	2
218	Phallus impudicus	3
105	Papaver Rhœas	3
172	Picris echioides	3
60	Rumex criſpus	1

11	Flag yellow	3
178	Fleabane common	3
179	—— ſmall	3
174	Groundſel common	1
83	Golden Saxifrage common	2
122	Ground-Ivy	2
50	Gooſefoot white	2
51	—— purple-jointed	2
53	Good King Henry	3
197	Harts-tongue	1
47	Hemlock	1
69	Heath croſs-leav'd	1
70	—— fine-leav'd	2
35	Hottonia water	1
208	Hypnum proliferous	1
209	—— ſilky	2
210	—— meadow	3
42	Honeyſuckle common	1
117	Henbit	2
58	Hyacinth Engliſh	2
168	Hawkweed long rooted	3
169	—— ſmall flowered	3
215	Hydnum ear-picker	3
100	Houſeleek	3
13	Hair-graſs early	3
170	Hemp-Agrimony Water	3
126	Hooded willow-herb common	3
43	Ivy	1
76	Knot-graſs common	1
139	Ladies-ſmock common	3
138	—— bitter	3
97	Looſeſtrife purple-ſpiked	3
96	Mouſear-chickweed marſh	2
93	—— leaſt	2
95	—— common	2
94	—— broad-leav'd	2
114	Marſh-Marygold	1
78	Moſchatel tuberous	2
157	Medick hop	2
15	Meadow-graſs hard	2
16	—— ſmooth-ſtalk'd	2
17	—— rough-ſtalk'd	2
194	Mercury Dogs	2
145	Mallow common	2
146	—— round-leav'd	3
213	Muſhroom Egg	2
212	—— pucker'd	2
214	—— ſlimy	3
215	—— plaited	3
216	—— oyſter	3
45	Moneywort	3
44	Mouſear-ſcorpion-graſs	3
218	Morell ſtinking	3
166	Nipplewort	1
40	Nightſhade woody	1
41	—— garden	2
124	Nettle hedge	3
185	Orchis Bee	1
187	—— early ſpotted	2
188	—— meadow	3
196	Orach ſpear-leav'd	2
88	Orpine	3
23	Oat-graſs yellow	3
24	—— tall	3
172	Oxtongue	3
36	Pimpernel common	1
37	—— bog	3
32	—— baſtard	3
91	Pink meadow	1
148	Pea wood	1
14	Poa common dwarf	1
72	Perſicaria ſpotted leav'd	1
73	—— pale flowered	1
74	—— ſpotted ſtalk'd	1
75	—— biting	1
77	—— ſmall creeping	1
198	Polypody common	1
183	Panſie wild	1
34	Pearlwort upright	2
33	—— procumbent	3
106	Pheaſants-eye	2
136	Podded Mouſear	2
110	Pilewort	2
29	Plantain narrow-leav'd	2
30	—— common	2
211	Polytrichum dwarf	2
105	Poppy ſmooth-round-headed	3
46	Periwinkle ſmall	3

——obtuſifolium

61	——— obtuſifolium	3
62	——— acutus	3
63	——— maritimus	3
107	Ranunculus bulboſus	1
108	——— hirſutus	2
109	——— acris	1
110	——— Ficaria	2
111	——— auricomus	2
112	——— ſceleratus	2
31	Scabioſa ſucciſa	3
33	Sagina procumbens	3
34	——— erecta	2
40	Solanum Dulcamara	1
41	——— nigrum	2
49	Scandix Anthriſcus	1
55	Sambucus Ebulus	3
80	Saxifraga granulata	1
81	——— tridactylites	2
84	Stellaria Holoſtea	2
82	Saponaria officinalis	2
85	Sedum album	2
86	——— acre	1
87	——— daſyphyllum	3
88	——— Telephium	3
100	Sempervivum tectorum	3
124	Stachys ſylvatica	3
125	——— paluſtris	3
126	Scutellaria galericulata	3
140	Siſymbrium ſylveſtre	3
167	Sonchus oleraceus	2
174	Senecio vulgaris	1
119	Thymus Acinos	1
120	——— Serpyllum	2
134	Thlaſpi Burſa-paſtoris	1
151	Trifolium ornithopodioides	2
152	——— ſubterraneum	2
153	——— fragiferum	2
154	——— agrarium	3
155	——— repens	3
176	Tuſſilago Petaſites	2
177	——— Farfara	2
192	Typha major	3
193	——— minor	3
1	Veronica agreſtis	1
2	——— chamædrys	1
3	——— ſerpyllifolia	1
4	——— hederifolia	2
5	——— arvenſis	2
6	——— Becabunga	2
7	——— officinalis	1
46	Vinca minor	3
115	Verbena officinalis	1
180	Viola odorata	1
181	——— hirta	1
182	——— canina	2
183	——— tricolor	1
184	——— paluſtris	3

59	Ruſh hairy field	2
137	Rocket ſtinking	3
140	——— water	3
98	Spurge ſmall garden	1
99	——— ſun	1
160	St. John's-wort ſmall upright	1
161	——— common	1
162	——— hairy	3
163	——— trailing	3
49	Scandix rough-ſeeded	1
80	Saxifrage white	1
81	——— rue-leav'd	2
85	Stonecrop white-flowered	1
86	——— common yellow	1
87	——— thick-leav'd	3
134	Shepherds-purſe	1
1	Speedwell procumbent garden	1
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3	——— ſmooth-leav'd	1
4	——— ivy-leav'd	2
5	——— wall	2
7	——— male	3
167	Sowthiſtle common	2
199	Spleenwort rough	2
135	Sauce-alone	2
84	Stitchwort greater	2
82	Sopewort	2
101	Strawberry barren	3
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149	Tine-tare rough-podded	1
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26	Teaſle ſmall	1
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152	Trefoil ſubterraneous	2
151	——— birds-foot true	2
153	——— Strawberry	2
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171	Thiſtle milk	3
164	Tutſan	3
10	Vernal-graſs ſweet-ſcented	1
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180	Violet ſweet-ſcented	1
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64	Willow-herb large-flowered	2
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3 ——— ſerpyllifolia
4 ——— hederifolia
5 ——— arvenſis
6 ——— Becabunga
7 ——— officinalis
8 Lycopus europæus
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41 ——— nigrum
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DIDYNAMIA ANGIOSPERMIA.
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133 Draba verna
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146 ——— rotundifolia
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DIADELPHIA DECANDRIA.
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153 ——— fragiferum

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155 ——— repens
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157 Medicago lupulina
158 ——— arabica
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164 ——— Androſæmum
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168 Hypochæris radicata
169 ——— glabra
170 Bidens cernua
171 Carduus marianus
172 Picris echioides
SYNGENESIA POLYGAMIA SUPERFLUA.
173 Erigeron acre
174 Senecio vulgaris
175 Bellis perennis
176 Tuſſilago Petaſites
177 ——— Farfara
178 Inula dyſenterica
179 ——— pulicaria
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181 ——— hirta
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190 Carex pendula
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191 Poterium Sanguiſorba
192 Typha latifolia
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DIOECIA ENNEANDRIA.
194 Mercurialis perennis
DIOECIA MONADELPHIA.
195 Hydrocharis Morſus Ranæ
POLYGAMIA MONOECIA.
196 Atriplex haſtata
CRYPTOGAMIA FILICES.
197 Aſplenium Scolopendrium
198 Polypodium vulgare
199 Oſmunda ſpicant
CRYPTOGAMIA MUSCI.
200 Bryum ſcoparium
201 ——— undulatum
202 ——— hornum
203 ——— truncatulum
204 ——— viridulum
205 ——— ſubulatum
206 Bryum argenteum
207 ——— ceſpititium
208 Hypnum proliferum
209 ——— ſericeum
210 ——— purum
211 Polytrichum ſubrotundum
CRYPTOGAMIA FUNGI.
212 Agaricus ovatus
213 ——— fimetarius
214 ——— glutinoſus
215 ——— plicatilis
216 ——— oſtreatus
217 Hydnum auriſcalpium
218 Phallus impudicus

CARDUUS MARIANUS. MILK THISTLE.

CARDUUS *Linnæi. Gen. Pl.* SYNGENESIA POLYGAMIA ÆQUALIS.
Calyx ovatus, imbricatus ſquamis ſpinoſis. *Receptaculum* piloſum.

Raii Syn. Gen. 18. HERBÆ FLORE EX FLOSCULIS FISTULARIBUS COMPOSITO, SIVE CAPITATÆ.

CARDUUS *marianus* foliis amplexicaulibus haſtato pinnatifidis ſpinoſis; calycibus aphyllis: ſpinis canaliculatis duplicato ſpinoſis. *Linn. Syſt. Vegetab. p.* 605. *Sp. Pl.* 1153.

SILYBUM nervis foliorum albis. *Haller. Hiſt. n.* 181.

CIRSIUM maculatum. *Scopoli Fl. Carniol. p.* 130.

CARDUUS albis maculis notatus vulgaris. *Bauhin. Pin. p.* 281.

CARDUUS mariæ. *Gerard. emac.* 1150.

CARDUUS mariæ vulgaris. *Parkinſon.* 976.
Raii Synop. p. 195. Common Milk Thiſtle, or Ladies Thiſtle.
Hudſon. Fl. Angl. ed. 2. *p.* 353.
Lightfoot. Fl. Scot. p. 454.

RADIX annua.

FOLIA radicalia ſupra terram expanſa, pedalia, bipedalia et ultra, pinnatifido ſinuata, nitida, margine ſpinoſa, ſuperne venis albis reticulatis picta, ſubinde vero immaculata, *Caulina* amplexicaulia, patentia, ſuprema recurvata, baſi cauli adpreſſa.

CAULIS tripedalis, ad orgyalem, ramoſus, inferne craſſitie digiti intermedii, tomentoſus, ſulcatus, ſuperne nudus, ſtriatus.

FLORES ſolitarii, magni, purpurei.

CALYX: Folia quæ calycem componunt varia ſunt, inferiora nempe rotundata, ſpinis ciliata; intermedia utrinque ad baſin ſpinis ciliata, acuminata, patentia, rigida, ſuperne canaliculata, ſpina flaveſcente terminata; ſuperiora et interiora lanceolata, inermia, apice purpurea, marginibus fiſſis, *fig.* 1, 2, 3.

COROLLULÆ infundibuliformes, tubo tenuiſſimo, curvato, albo, *fig.* 4; *Limbo* erecto, quinquefido, baſi ſubgloboſo, nitido, intus melleum liquorem fundente, laciniis linearibus, æqualibus.

STAMINA: FILAMENTA quinque, capillaria, breviſſima: ANTHERÆ purpureæ, in tubum tenuiſſimum coalitæ, *fig.* 6.

PISTILLUM: GERMEN ovatum, compreſſum, album: STYLUS filiformis, ſtaminibus longior, prope apicem circulo villorum coronato, dein utrinque ſulcato et apice bifido, *fig.* 7.

SEMINA plurima, ovata, ſubangulata, nitida, nigricantia, pappo obliquo, rigidulo, ſimplici, albido coronata.

RECEPTACULUM piloſum.

ROOT annual.

LEAVES next the root, expanded on the ground, from one to two feet or more in length, ſinuated, and pinnatifid, ſhining, the edge ſpinous, on the upper ſide painted with white veins, which form a kind of net work, but ſometimes wholly green; *leaves on the ſtalk* partly ſurrounding the ſtem, ſpreading, the uppermoſt leaves bent back, the baſe of each preſſed cloſe to the ſtalk.

STALK from three to ſix feet high, branched, at bottom about the thickneſs of the middle finger, downy, grooved, at top naked, and finely channeled.

FLOWERS one on each ſtalk, large, and purple.

CALYX. The leaves which compoſe the calyx are various; the lowermoſt are of a roundiſh ſhape, and edged with ſpines; the middle ones edged with ſpines towards the bottom, and running out to a point, ſpreading, rigid, hollow on the upper ſide, and terminating in a yellowiſh ſpine; the upper and innermoſt leaves lanceolate, without ſpines, purple at top, and notched on the edges, *fig.* 1, 2, 3.

FLORETS funnel ſhaped; tube very ſlender, bent, and white, *fig.* 4; *Limb* erect, divided into five ſegments, at bottom ſomewhat globular, and ſecreting a honey liquor withinſide, the ſegments linear, and equal in length.

STAMINA: five FILAMENTS, very ſhort, and fine: ANTHERÆ purple, united into a very ſlender tube, *fig.* 6.

PISTILLUM: GERMEN oval, flattened, and white: STYLE thread-ſhaped, longer than the ſtamina, crowned near the top with a circle of ſhort hairs, from thence grooved on each ſide, and bifid at top, *fig.* 7.

SEEDS numerous, oval, ſomewhat angular, ſhining, of a blackiſh colour, crowned with a ſtiffiſh, ſimple, white down, growing obliquely.

RECEPTACLE hairy.

THE beautiful milk white veins which form an irregular net work on the upper ſide of the leaves of this ſpecies of *Thiſtle*, joined to its grandeur, render it an object which ſtrikes the attention of moſt: and where theſe veins exiſt, they ſerve alſo very well to characterize the plant: the leaves however are frequently wholly green; in which caſe, it becomes neceſſary to have recourſe to ſome of its other characters, than which none are more conſpicuous than the ſtrong ſpines which defend the bloſſom.

The ſeeds are large, and contain a portion of oil, whence they have ſometimes been made uſe of in emulſions: but they more often ſerve as food for the Goldfinch, and other granivorous birds.

It is a very common plant on our banks, by the ſides of roads, and among rubbiſh, and flowers in May and June. The variety with green leaves, I have obſerved on the banks near *Kennington* Turnpike.

Did it not occupy ſo much ſpace, its beauty would recommend it as a garden plant.

Carduus marianus

Sansom sculp.

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Sedum dasyphyllum

Sansom Sculp

SEDUM DASYPHYLLUM. THICK-LEAVED STONECROP.

SEDUM *Linnæi. Gen. Pl.* DECANDRIA PENTAGYNIA.

Cal. 5-fidus. *Cor.* 5-petala. *Squamæ* nectariferæ 5 ad baſin germinis. *Caps.* 5.

Raii Syn. Gen. 17. HERBÆ MULTISILIQUÆ SEU CORNICULATÆ.

SEDUM *daſyphyllum* foliis oppoſitis ovatis obtuſis carnoſis, caule infirmo, floribus ſparſis. *Linn. Syſt. Vegetab. p.* 358. *Spec. Plant.* 618.

SEDUM foliis conicis, obtuſis, glaucis, reticulatis; caule ramoſo viſcido. *Haller. Hiſt. n.* 961.

SEDUM *daſyphyllum. Scopoli. Fl. Carn. n.* 555.

SEDUM minus circinato folio. *Bauhin. Pin.* 283.

SEDUM foliis cordato-ovatis compreſſis ſæpius oppoſitis, floribus ſparſis. *Sauv. Monſp.* 8.

SEDUM foliis ſemiglobofis ſubovatis ſeſſilibus quadrifariam imbricatis. *Wachend. ultr.* 391.

AIZOON daſyphyllum. *Dalech. Hiſt.* 1133.
Raii Syn. ed. 3. *p.* 271.
Hudſon. Fl. Angl. 172. *ed.* 2. *p.* 197.

PLANTA perennis.	The PLANT is perennial.
CAULES plurimi, triunciales et ultra, teretes, debiles, viſcoſi, ſimplices, erecti, baſi repentes.	STALKS numerous, about three inches high, round, weak, clammy, ſimple, upright, and creeping at bottom.
FOLIA pro ratione plantæ magna, plerumque oppoſita, cordato-ovata, adnata, carnoſa, glauca, interne planjuſcula, externe convexa, punctata, ſæpe rubore quaſi reticulata, circa medium caulis majora, inferiora interne excavata.	LEAVES, in proportion to the plant, large, generally oppoſite, of an heart-ſhaped oval figure, growing to the ſtalk, fleſhy, of a blueiſh green colour, flattiſh on the inſide, and convex on the outſide, dotted, frequently veined with red, largeſt about the middle of the ſtalk, the lowermoſt hollow on the inſide.
PEDUNCULI ramoſi, viſcidi, priuſquam flores aperiuntur nutantes.	FLOWER-STALKS branched, clammy, before the flowers open hanging down.
FLORES intus albi, externe rubentes.	FLOWERS white on the inſide, externally reddiſh.
CALYX: PERIANTHIUM ſexpartitum, parvum, laciniis ovatis, carnoſis, viſcidis, *fig.* 1, parum auct.	CALYX: a PERIANTHIUM divided into ſix ſegments, ſmall, the ſegments oval, fleſhy, and viſcid, *fig.* 1, a little magnified.
COROLLA: PETALA ſex, ovato-acuta, plana, patentia, calyce triplo longiora, carinata, *fig.* 2, magn. nat.	COROLLA: ſix PETALS, oval and pointed, flat, ſpreading, three times the length of the calyx, midrib projecting, *fig.* 2, natural ſize.
NECTARIA ſex, ſingulum glandula minima flava ſingulo germini ad baſin extrorſum poſita, *fig.* 5.	NECTARIES ſix, each a ſmall yellow gland, placed externally at the bottom of each germen, *fig.* 5.
STAMINA: FILAMENTA plerumque duodecim, ſubulata, longitudine corollæ: ANTHERÆ primum ſubrotundæ, rubræ, demum compreſſæ: POLLEN flavum, *fig.* 3.	STAMINA: FILAMENTS moſt commonly twelve, tapering, the length of the corolla: ANTHERÆ, firſt roundiſh, and of a red colour, laſtly flatten'd: the POLLEN yellow, *fig.* 3.
PISTILLUM: GERMINA ſex, oblonga, deſinentia in STYLOS tenuiores: STIGMATA ſimplicia, recurvata, *fig.* 4.	PISTILLUM: ſix GERMINA, oblong, terminating in ſlender STYLES: STIGMATA ſimple, and bending down, *fig.* 4.
PERICARPIUM: CAPSULÆ ſex, pallide fuſcæ, introrſum dehiſcentes.	SEED-VESSEL: ſix CAPSULES of a pale brown colour, opening internally.
SEMINA minima, flaveſcentia.	SEEDS very minute, and yellowiſh.

SUCH perſons as are fond of decorating the rock work of their gardens with plants, cannot ſelect one better adapted to the purpoſe than the preſent ſpecies of *Stonecrop.* It grows without any trouble, in any aſpect, multiplys very much by young ſhoots, and looks beautiful throughout the year. Indeed it is ſtrange that it has not yet made its way more univerſally into gardens.

I have frequently noticed it on the walls about town. It grows particularly in great abundance on a wall near *Chelſea Hoſpital*, on the left-hand ſide of the horſe-road, on turning the corner out of *Paradiſe-Row*; likewiſe on a wall on the left-hand ſide of the lane leading from *Kenſington gravel-pits* to *Acton*; and elſewhere.

Its thick white leaves readily diſtinguiſh it from every other ſpecies of Stonecrop.

Botaniſts have differed widely in the deſcriptions of theſe, as will appear from a peruſal of the Synonyms.

It flowers in June; and has generally one additional part more throughout the whole of the fructification than the *Sedum acre*, and other *Stonecrops*.

AIRA PRÆCOX. EARLY HAIR-GRASS.

AIRA *Linnæi. Gen. Pl.* TRIANDRIA DIGYNIA.

Cal. 2-valvis, 2-florus. *Floſculi* abſque interjecto rudimento.

Raii Syn. Gen. 27. HERBÆ GRAMINIFOLIÆ FLORE IMPERFECTO CULMIFERÆ.

AIRA *præcox* foliis ſetaceis; vaginis angulatis, floribus paniculato ſpicatis, floſculis baſi ariſtatis. *Linnæi Syſt. Vegetab. p.* 96.

GRAMEN paniculatum minimum molle. *Bot. Monſp. App.*

GRAMEN parvum præcox paniculâ (potius ſpicâ) laxâ caneſcente. *Raii Syn. ed.* 3. *p.* 408. *tab.* xxii. *fig.* 2.

GRAMEN avenaceum, capillaceum, minimis glumis minimum. *Breynii.*

GRAMEN phalaroides, ſparſâ paniculâ minimum anguſtifolium. *Barrel. Ic.* 44. 1. *tab.* iv. *fig.* 15.

Lightfoot. Fl. Scot. p. 95.

Hudſon. Fl. Angl. 31. *ed.* 2. *p.* 36.

Oeder. Fl. Dan. 383.

RADIX annua, fibroſa.	ROOT annual, and fibrous.
CULMI plures, ſimplices, bi aut triunciales, ſemipedales etiam occurrunt, teretes, læves, erecti.	STALKS ſeveral, ſimple, from two to three inches, ſometimes even to ſix inches high, round, ſmooth, and upright.
FOLIA radicalia ſæpius linearia, convoluta, marcida; caulina vaginâ breviora, ſuberecta, paululum recurvata, obtuſiuſcula; *Membrana* pro ratione folii longa, alba, culmum circumvolvens, in plantis adhuc tenellis notatû digna; *Vagina* ſtriata, ſubventricoſa.	LEAVES, near the root generally linear, rolled up, and withered; thoſe of the ſtalk ſhorter than the ſheath, nearly upright, but bending a little back, and ſomewhat blunt; the *Membrane*, for the ſize of the leaf, long, white, ſurrounding the ſtem, ſtrikingly conſpicuous in the plant while young; the *Sheath* finely grooved, and bellying a little in the middle.
PANICULA coarctata, ſpiciformis, mollis, ſemiuncialis, aut uncialis.	PANICLE cloſed together, and reſembling a ſpike, ſoft, half an inch or an inch in length.
SPICULÆ bifloræ, biariſtatæ, *fig.* 1. auct.	SPICULÆ containing two flowers, each of which has an ariſta, *fig.* 1, magnified.
CALYX: GLUMA bivalvis, valvulæ ſubæquales, ovato-acutæ, ſubmembranaceæ, carinâ ad lentem ſcabrâ, *fig.* 2.	CALYX: a GLUME of two valves, the valves nearly equal, oval, and pointed, ſomewhat membranous, the keel appearing rough when magnified, *fig.* 2.
COROLLA: GLUMA bivalvis, valvulæ ſubæquales, longitudine calycis, altera majori, bicuſpidatâ, ariſtatâ; ariſta infra medium glumæ poſita, corollâ duplo longior, plerumque recta, *fig.* 3, 5.	COROLLA: a GLUME of two valves, nearly equal, of the length of the calyx, one of which is larger than the other, terminated by two long points, and furniſhed with an ariſta; the ariſta growing out from below the middle of the glume, twice the length of the corolla, and generally ſtrait, *fig.* 3, 5.
STAMINA: FILAMENTA tria, capillaria, breviſſima: ANTHERÆ minimæ, flaveſcentes, *fig.* 4.	STAMINA: three FILAMENTS, fine, and very ſhort: ANTHERÆ very minute, and yellowiſh, *fig.* 4.
PISTILLUM: GERMEN oblongum: STYLI duo, ad baſin uſque ramoſi.	PISTILLUM: GERMEN oblong: STYLES two, and branched to the bottom.
SEMEN oblongum, hinc convexum inde concavum, bicuſpidatum, ariſtatum, baſi piloſum, *fig.* 6, 7.	SEED oblong, convex on one ſide, and hollow on the other, having two points, with an ariſta, hairy at bottom, *fig.* 6, 7.

THE *Aira præcox* is very common on moſt of our heaths about town, particularly on *Black-heath.*

It flowers in April and May, and ripens its ſeed in June.

SCHEUCHZER mentions its growing ſometimes to the height of fourteen inches, a height it rarely attains with us.

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Aira præcox

Sansom Sculp.

Hypochæris glabra

Sansom Sculp

HYPOCHÆRIS GLABRA. SMALL-FLOWERED HAWKWEED.

HYPOCHÆRIS *Linnæi Gen. Pl.* SYNGENESIA POLYGAMIA ÆQUALIS.

Receptaculum paleaceum. *Cal.* ſubimbricatus. *Pappus* plumoſus.

Raii Syn. Gen. 6. HERBÆ FLORE COMPOSITO NATURA PLENO LACTESCENTES.

HYPOCHÆRIS *glabra*, calycibus oblongis imbricatis, caule ramoſo nudo, foliis dentato-ſinuatis. *Linn. Syſt. Vegetab. p.* 601. *Sp. Pl. p.* 1140.

HYPOCHÆRIS foliis glabris ſemipinnatis. *Haller. Catal. Plant. Gotting. p.* 421. *Hiſt. Plant. addend ad tom.* 1. *v.* 3. *p.* 180.

HIERACIUM minus dentis leonis folio oblongo glabro. *Bauhin. pin.* 127.

HYPOCHÆRIS chondrillo folio, parvo flore. *Vaillant. act.* 1721. *p.* 214.

HIERACIUM parvum in arenoſis naſcens, ſeminum pappis denſe radiatis. *Raii. Syn.* 166.

HIERACIUM minimum. *Col. ecph.* I. 27. *ic.*

Hudſon. Fl. Angl. p. 303. *ed.* 2. *p.* 347.

Oeder. Fl. Dan. Ic. 424.

Lightfoot. Fl. Scot. p. 442.

RADIX annua, craſſitie pennæ coracis, fuſiformis, paucis fibrillis inſtructa, pallide fuſca.

FOLIA *radicalia* plurima, ſupra terram expanſa, longitudine minimi digiti, et ejuſdem circiter latitudinis, ſinuato-dentata, ad apicem paulo latiora, glabriuſcula, margine præſertim pilis hiſpidulis ciliata, lacteſcentia; *oaulina* pauca, minima.

CAULES plerumque plures, ſpithamæi, ſuberecti, in duos vel tres ramos diviſi, glauci, teretes, ſubnudi.

PEDUNCULI ſquamoſi, ſub floribus paululum incraſſati.

FLORES *minimi*, lutei.

CALYX communis, primum cylindraceus, peractâ floreſcentiâ oblongo conicus, *magnus*; ſquamæ læves, imbricatim poſitæ, ovato-lanceolatæ, inæquales, apicibus rubris.

COROLLA *compoſita*, imbricata, uniformis; *corollulis* hermaphroditis, æqualibus, numeroſis; propia monopetala, tubus infundibuliformis, apice *hiſpidulus*, *fig.* 3; limbus planus, quinquedentatus, *fig.* 2.

STAMINA: FILAMENTA quinque, in tubum coalita, *fig.* 4.

PISTILLUM: GERMEN infra corollam propriam, *fig.* 6: STYLUS filiformis, longitudine ſtaminum: STIGMATA duo reflexa, *fig.* 5.

RECEPTACULUM *paleaceum*, paleæ concavæ, lanceolatæ, acuminatæ, nitidæ, longitudine pappi, *deciduæ*, *fig.* 1.

SEMINA ſublinearia, baſi acuminata, caſtanea, *fig.* 7, lente viſa lineata, ſcabra, *fig.* 8, in *radio ſeſſilia, in diſco petiolata.*

PAPPUS inæqualis, plumoſus, rigidulus, *fig.* 9.

ROOT annual, about the thickneſs of a crow quill, tapering, furniſhed with few fibres, of a pale brown colour.

LEAVES *of the root* numerous, ſpread on the ground, about the length of the little finger, and of the ſame breadth, ſinuated, or deeply indented, a little broadeſt at top, ſmooth, but not perfectly ſo, the edges particularly, being thinly beſet with ſtiffiſh hairs; *thoſe on the ſtalk* few, and very minute.

STALKS uſually ſeveral, about ſeven inches high, nearly upright, divided into two or three branches, round, almoſt naked, and of a glaucous colour.

FLOWER-STALKS ſcaly, a little thickened under the flower.

FLOWERS *very ſmall*, and yellow.

CALYX common to many flowers, at firſt cylindrical, when the flowering is over, becoming of an oblong conical ſhape, and *large*; the *ſcales* ſmooth, placed one over another, of an oval pointed ſhape, uneven, the tips red.

COROLLA *compound*, the florets placed one over the other, of an uniform ſhape, hermaphrodite, equal, and numerous; each floret monopetalous; the tube funnel-ſhaped, with a *few ſtiffiſh hairs at top*, *fig.* 3; the limb flat, with five teeth, *fig.* 2.

STAMINA: five FILAMENTS united into a tube, *fig.* 4.

PISTILLUM: GERMEN placed beneath each ſingle floret, *fig.* 6: STYLE thread-ſhaped, the length of the ſtamina: STIGMATA two, bending back, *fig.* 5.

RECEPTACLE chaffy, chaff hollow, narrow, pointed, ſhining, the length of the down, and *deciduous*, *fig.* 1.

SEEDS nearly linear, tapering to a point at bottom, of a cheſnut colour, *fig.* 7, viewed with a magnifier, finely grooved, and rough, *fig.* 8, *thoſe in the circumference ſeſſile, thoſe in the center ſtanding on foot-ſtalks.*

DOWN uneven, feathered, and ſtiffiſh, *fig.* 9.

In the third edition of RAY's *Synopſis*, there is an accurate account given of this plant, which he informs us, he omitted in his *Hiſt. Plant.* not being certain at that period, whether it was not a variety of ſome other plant of the ſame family. It muſt be admitted, that many of the plants of this claſs, very much reſemble one another at firſt ſight, whence the ſtudent is apt to conſider them as a difficult tribe: but however ſtrongly the objection of a *ſimilarity of habit* may be urged againſt the *Hypochæris glabra*, whoever has once ſeen it in bloſſom, will never miſtake it for any other; the flowers being remarkably ſmall for a plant of this kind, not exceeding the ſize of a ſilver threepence, while the heads containing the ſeeds, are altogether as large in proportion to the ſize of the plant. This ſimilarity of habit, may be one cauſe why this plant is not oftener found; but a more particular one, perhaps, is the ſhort time of the flowers expanſion, as it does not open till about nine of the clock in the morning, and ſhuts again about one or two in the afternoon.

HALLER's account of the ſeeds of this plant is very juſt: thoſe in the center have foot-ſtalks, and thoſe in the circumference none; hence this plant unites thoſe genera, whoſe characters are drawn from this circumſtance.

I have found this ſpecies of *Hypochæris* in tolerable abundance on *Black-heath*, particularly under Greenwich Park Wall, on the South-ſide. By RAY it is mentioned to grow, on the authority of DOODY, in the fields between *Kingſton* and *Richmond*; by Mr. HUDSON, about *Briſtol*; near *Norwich*, by Mr. PITCHFORD; and in *Scotland*, though rarely, by Mr. LIGHTFOOT.

It delights in a gravelly or ſandy ſoil, and expoſed ſituation; and flowers in June.

PICRIS ECHIOIDES. OX-TONGUE.

PICRIS *Linnæi Gen. Pl.* SYNGENESIA POLYGAMIA ÆQUALIS.

Recept. nudum. *Cal.* calyculatus. *Pappus* plumoſus. *Sem.* tranſverſim ſulcata.

Raii Syn. Gen. 6. HERBÆ FLORE COMPOSITO; NATURA PLENO LACTESCENTES.

PICRIS *echioides* perianthiis exterioribus pentaphyllis, interiore ariſtato majoribus. *Linnæi Syſt. Vegetab. p.* 593. *Spec. Plant.* 1114.

HIERACIUM echioides capitulis cardui benedicti. *Bauhin Pin.* 128.

BUGLOSSUM luteum. *Gerard emac.* 798.

LINGUA BOVIS. *Parkinſon* 800. *Raii Syn. p.* 196, Lang de bœuf.

Hudſon Fl. Angl. ed. 2. *p.* 342.

RADIX annua, ramoſa.	ROOT annual, and branched.
CAULIS bi aut tripedalis, ramoſiſſimus, ramis divaricatis, erectus, rubens, ſtriatus, ſpinoſus, ſpinis plurimis, horizontalibus, apice hamatis.	STALK two or three feet high, very much branched, the branches divaricating, upright, of a reddiſh purple colour, ſtriated, and ſpinous, the ſpines numerous, horizontal, and hooked at the extremity.
FOLIA amplexicaulia, oblonga, acuta, tuberculoſa, ſpinoſa.	LEAVES embracing the ſtalk, oblong, pointed, covered with tubercles and ſpines.
PEDUNCULI ſulcati, verſus apicem ſenſim incraſſati.	FLOWER-STALKS grooved, and gradually enlarged towards the extremity.
CALYX communis duplex, exterior maximus, pentaphyllus, Involucro ſimilis, foliolis cordatis, ſpinoſis, interior imbricatus, ſquamæ exteriores, paucæ, minimæ, inæquales, interiores erectæ, æquales, ariſtatæ, *fig.* 1, 2, carinatæ, carinâ cum ariſtâ hiſpidis, ſetæ inferiores unculis quatuor apice inſtructis, *fig.* 3, ſuperiores ſpinoſæ, ſimplices, longiores.	CALYX common to many florets, and double; the exterior one large, and compoſed of five heart-ſhaped prickly leaves, which reſemble an Involucrum; the inner one imbricated; the outermoſt ſcales few, ſmall, and uneven; the innermoſt upright, equal, terminating with an ariſta, *fig.* 1, 2, keeled, the keel together with the ariſta hiſpid, the little ſpines on the lower part terminating in four ſmall hooks, *fig.* 3, thoſe on the upper part ſimple and longer.
COROLLA compoſita, *Corollulæ* hermaphroditæ, tubuloſæ, flavæ; Tubus tenuis, piloſus, *fig.* 4, albidus; Limbus quinquedentatus, dentibus inæqualibus.	COROLLA compound; the *Florets* hermaphrodite, and yellow; the Tube ſlender, hairy, *fig.* 4, and whitiſh; the Limb terminated by five unequal teeth.
STAMINA: FILAMENTA quinque, capillaria, breviſſima: ANTHERÆ in tubum tenuem, flavum, coalitæ.	STAMINA: five FILAMENTS, very fine and ſhort: ANTHERÆ united in a ſlender yellow tube.
PISTILLUM: GERMEN oblongum, læve, album: STYLUS filiformis, antheris longior: STIGMATA duo, reflexa.	PISTILLUM: GERMEN oblong, ſmooth, and white: STYLE thread-ſhaped, and longer than the antheræ: STIGMATA two, turning back.
SEMEN oblongum, ruſum, tranſverſim minutiſſime ſtriatum.	SEED oblong, of a reddiſh orange colour, very finely ſtriated tranſverſely.
PAPPUS ſtipitatus, piloſus, *fig.* 5.	DOWN ſtanding on a foot-ſtalk, and hairy, *fig.* 5.

The only uſe to which we find this ſingular plant to have been applied, is as a pot-herb, *Raii Hiſt. p.* 233, to which purpoſe its appearance is certainly no recommendation.

It grows not unfrequently on banks, on the edges of fields, and in woods that have been cut down; and flowers in June and July.

Picris echioides

Sansom sculp.

Lysimachia Nummularia

Sansom sculp.

LYSIMACHIA NUMMULARIA. MONEYWORT.

LYSIMACHIA *Linnæi Gen. Pl.* PENTANDRIA MONOGYNIA.

Cor. rotata. *Capſ.* globoſa, mucronata, 10-valvis.

Raii Syn. Gen. 18. HERBÆ FRUCTU SICCO SINGULARI FLORE MONOPETALO.

LYSIMACHIA *Nummularia* foliis ſubcordatis, floribus ſolitariis, caule repente. *Lin. Syſt. Veget. p.* 165. *Sp. Pl. p.* 211. *Fl. Suecic. p.* 63.

LYSIMACHIA caule proſtrato, foliis ſubrotundis, petiolis alaribus unifloris. *Haller Hiſt. Helv. n.* 629.

LYSIMACHIA *Nummularia. Scopoli Fl. Carniol. n.* 216.

NUMMULARIA major lutea. *Bauhin Pin.* 309.

NUMMULARIA. *Gerard emac.* 630.

NUMMULARIA vulgaris. *Parkinſon* 555.

Raii Synop. p. 283, Moneywort, or Herb Twopence.

Oeder. Flor. Dan. Ic. 493.

Hudſon Fl. Angl. ed. 2. *p.* 87.

Lightfoot Fl. Scot. p. 138.

RADIX perennis, fibroſa, fibris ſimplicibus, deſcendentibus.	ROOT perennial and fibrous, the fibres ſimple, and ſtriking downward.
CAULES plures, ſimplices, procumbentes, verſus apicem repentes et ſubramoſi, pedales et ultra, læves, geniculati, utrinque profunde canaliculati, ſive tetragoni.	STALKS numerous, ſimple, trailing, towards the top creeping and ſomewhat branched, a foot or more in length, ſmooth, jointed, deeply channeled on each ſide, or four-cornered.
FOLIA ovato-orbiculata, oppoſita, erecta, glabra, ſubvenoſa, parum undulata, petiolis brevibus, latis, decurrentibus, inſidentia.	LEAVES of a ſhape betwixt ovate and round, oppoſite, upright, ſmooth, ſomewhat veiny, and a little waved, ſitting on ſhort broad footſtalks, which run down the main ſtalk.
PEDUNCULI plerumque bini, oppoſiti, erecti, longitudine foliorum, angulati, verſus apicem ſenſim incraſſati.	FLOWER-STALKS growing generally two together, one oppoſite the other, upright, the length of the leaves, angular, gradually enlarged towards the end.
FLORES lutei, majuſculi, ſubrotati.	FLOWERS yellow, large in proportion to the leaves, and ſomewhat wheel-ſhaped.
CALYX: PERIANTHIUM pentaphyllum, foliolis cordato-acutis, erectis, ſubcarinatis, marginibus, baſi reflexis, *fig.* 1.	CALYX: a PERIANTHIUM of five leaves, heart-ſhaped and pointed, ſomewhat keeled, the edges at bottom turning back, *fig.* 1.
COROLLA quinquepartita, laciniis ovatis, acutis, patentibus, calyce duplo longioribus, ſuberoſis, margine glanduloſâ, adhibito microſcopio, *fig.* 2.	COROLLA deeply divided into five ſegments, which are oval, pointed, and twice the length of the calyx, ſlightly jagged and glandular on the edge, if viewed with a microſcope, *fig.* 2.
STAMINA: FILAMENTA quinque, ſubulata, erecta, *glanduloſa*, corollâ breviora: ANTHERÆ ſagittatæ, *fig.* 3, 4.	STAMINA: five FILAMENTS, tapering, upright, *glandular*, and ſhorter than the corolla: ANTHERÆ arrow-ſhaped, *fig.* 3, 4.
PISTILLUM: GERMEN ſubrotundum: STYLUS filiformis, ſtaminibus paulo longior, nudus: STIGMA parvum, obtuſum, *fig.* 5, 6.	PISTILLUM: GERMEN nearly round: STYLE thread-ſhaped, a little longer than the ſtamina: STIGMA ſmall and blunt, *fig.* 5, 6.
PERICARPIUM plerumque abortat.	SEED-VESSEL rarely comes to perfection.

It often happens that thoſe plants which increaſe much while in flower, either by their roots or ſtalks, ſeldom produce ripe ſeeds: this is the caſe with the *Butterbur* and *Periwinkle*, as well as the preſent plant, on which, though I have examined a great number of ſpecimens, I have not hitherto been fortunate enough to diſcover capſules ripe and perfectly formed; yet it is probable, that in ſome particular ſituations, ſuch may be found.

The name of *Moneywort* has been given to this ſpecies from the roundneſs of its leaves, by which it is, in one inſtance, diſtinguiſhed from the *Lyſimachia nemorum*. It grows in meadows, particularly on the edges of the ditches; alſo under hedges in moiſt ſituations; and is too common to need any particular place of its growth to be pointed out.

In a moiſt ſituation, no plant thrives more in a garden, nor with leſs trouble: it continues a long while in bloſſom; but without this advantage, the beauty and ſingularity of its foliage, is ſufficient to recommend it.

The taſte of the leaves is ſubaſtringent, and very ſlightly acid; hence they ſtand recommended by BOERHAVE in the hot ſcurvy, and in uterine and other hæmorrhages. But their effects are ſo inconſiderable, that common practice takes no notice of them. *Lewis's Diſp. p.* 184.

It is eaten by Kine and Sheep, not much reliſhed by Goats, and refuſed by Horſes. *Lin. Amæn. Acad. Pan. Suec.*

LINUM CATHARTICUM. PURGING FLAX.

LINUM *Lin. Gen. Pl.* PENTANDRIA PENTAGYNIA *Cal.* 6 phyllus. *Pet* 5. *Caps* 5. valvis, 10 locularis. *Sem.* ſolitaria.

Raii Syn. Gen. 24. HERBÆ PENTAPETALÆ VASCULIFERÆ.

LINUM *catharticum* foliis oppoſitis, ovato-lanceolatis, caule dichotomo, corollis acutis. *Lin. Syſt. Vegetab. p.* 250. *Sp. plant. p.* 401. *Fl. Suecic. p.* 100.

LINUM foliis conjugatis, ovatis, calycibus ariſtatis, patulis, lanceolatis. *Haller Hiſt. n.* 839.

LINUM *catharticum. Scopoli. Fl. Carn. n.* 389.

LINUM pratenſe floſculis exiguis. *Bauhin. pin.* 214.

LINUM ſylveſtre catharticum. *Ger. emac.* 560. *Parkinſon.* 1336. *Raii Syn. p.* 362. purging or wild Dwarf-Flax or Mill-mountain.

Lightfoot Fl. Scot. p. 174.

Hudſon. Fl. Angl. ed. 2. *p.* 134.

RADIX annua, fibroſa.	ROOT annual, and fibrous.
CAULIS palmaris aut dodrantalis, erectus, teres, lævis, ſuperne ramoſus.	STALK from three to nine inches high, upright, round, ſmooth, branched at top.
FOLIA oppoſita, elliptica, ſuberecta, lævia, integerrima, glauca, in ſummis ramis alterna, lanceolata.	LEAVES oppoſite, elliptical, nearly upright, ſmooth, perfectly entire, glaucous, on the tops of the branches alternate, and lanceolate.
FLORES albi, ante antheſin penduli.	FLOWERS white, before they blow pendulous.
CALYX: PERIANTHIUM pentaphyllum, perſiſtens, foliolis lanceolatis, erectis, carinatis. *fig.* 1.	CALYX: a PERIANTHIUM of five leaves and permanent, the leaves lanceolate, and upright, with a prominent midrib. *fig.* 1.
COROLLA pentapetala, petalis Calyce duplo longioribus, patentibus, ovatis, acutis, prope baſin leviter cohærentibus, trinervibus, unguibus flavis. *fig.* 2.	COROLLA compoſed of five petals, which are twice the length of the Calyx, ſpreading, oval and pointed, ſlightly uniting at the baſe, having three ribs and yellow claws. *fig.* 2.
STAMINA: FILAMENTA quinque æqualia, ſubulata, baſi latiora, ſubcoaleſcentia; ANTHERÆ ſubrotundæ, flavæ. *fig.* 3.	STAMINA: five FILAMENTS of equal length, tapering, broadeſt and ſlightly uniting at bottom; ANTHERÆ roundiſh and yellow. *fig.* 3,
PISTILLUM: GERMEN ſubovatum, angulatum; STYLI quinque, longitudine ſtaminum; STIGMATA rotunda, flava. *fig.* 4. 5.	PISTILLUM: GERMEN angular; STYLES five, the length of the Stamina; STIGMATA roundiſh, and yellow. *fig.* 4. 5.
PERICARPIUM: CAPSULA globoſa, angulata, decemlocularis, quinquevalvis, Calyce tecta. *fig.* 6.	SEED-VESSEL: a round, angular CAPSULE, with ten cavities and five valves cover'd with the Calyx. *fig.* 6.
SEMINA ſolitaria, ovata, planiuſcula, flava, nitida. *fig.* 7.	SEEDS ſingle, oval, flattiſh, yellow and ſhining. *fig.* 7.

THIS ſmall and delicate ſpecies of Flax is a very common plant throughout the kingdom on hilly ſituations particularly where the ſoil is chalky, it alſo ſometimes found in Meadows.

It flowers in June, July and Auguſt.

An infuſion in water or whey of a handfull of the freſh leaves, or a dram of them in ſubſtance when dried, are ſaid to purge without inconvenience. *Lewis Diſp. p.* 168.

Linum catharticum

Sansom Sculp.

Hypochæris radicata

Sanſom Sculp

HYPOCHÆRIS RADICATA. LONG-ROOTED HAWKWEED.

HYPOCHÆRIS *Lin. Gen. Pl.* SYNG. POLYGAMIA ÆQUALIS. *Recept.* paleaceum. *Cal.* ſubimbricatus. *Pappus* plumoſus.

Raii Syn. Gen. 6. HERBÆ FLORE COMPOSITO NATURA PLENO LACTESCENTES.

HYPOCHÆRIS radicata foliis runcinatis obtuſis ſcabris, caule ramoſo nudo lævi, pedunculis ſquamoſis. *Lin. Sp. Pl. p.* 1140. *Fl. Suecic. n.* 709.

HYPOCHÆRIS foliis ſemipinnatis hirſutis, caule nudo, brachiato. *Haller. Hiſt. p.* 3. *n.* 3.

ACHYROPHORUS radicatus. *Scopoli. Fl. Carn. n.* 987.

HIERACIUM Dentis leonis folio obtuſo majus. *Bauhin. pin.* 127.

HIERACIUM longius radicatum. *Lob. ic.* 238. *Gerard. emac.* 298. *Parkinſon.* 790. *Raii. Syn.* long rooted Hawkweed.

Hudſon. Fl. Angl. ed. 2.

Oeder. Fl. Dan. ic. 150.

Lightfoot Fl. Scot. p. 443.

RADIX perennis, craſſitie digiti minimi, alte in terram deſcendens, albida, plerumque ſimplex, lacteſcens.

FOLIA *radicalia*, ſupra terram expanſa, planiuſcula, oblonga, obtuſa, ſinuato-dentata, dentibus ſubobtuſis, hirſuta, pilis ſimplicibus, erectis, e punctis prominulis prodeuntibus, *caulina* nulla.

CAULES ſæpe plures ex eadem radice, pedales aut bipedales, ſuberecti, nudi, ſquamis ſolum brevibus, ovato-acutis, ciliatis, ad exortum ramorum inſtructi, glaberrimi, glauci, ſubſtriati, tenaces, ſolidi, ramoſi.

PEDUNCULI longi, ſquamis paucis obſiti, verſus apicem paululum incraſſati.

CALYX communis imbricatus, ſquamis ovatis, acutis, glabris, apice rufis, carinâ ciliatâ pilis rigidulis. *fig.* 1.

COROLLA *Compoſita*, imbricata; Corollulis hermaphroditis, æqualibus, numeroſis, *Propria* monopetala, ligulata, truncata, quinque-dentata, tubo apice piloſo. *fig.* 2. 3.

STAMINA: FILAMENTA quinque, capillaria; ANTHERÆ in tubum coalitæ, flavæ.

PISTILLUM: GERMEN ovatum; STYLUS filiformis, longitudine Staminum; *Stigmata* duo, reflexa.

SEMEN oblongum, rufum, ſtriatum. *fig.* 5.

PAPPUS ſtipitatus, plumoſus.

RECEPTACULUM paleaceum, paleæ longæ, nitidæ, membranaceæ, concavæ. *fig.* 4.

ROOT perennial, the thickneſs of the little finger, running deeply into the earth, generally ſimple, of a whitiſh colour, and milky within.

LEAVES next the root expanded on the ground, flattiſh, oblong, obtuſe, ſinuated and toothed (the teeth bluntiſh,) hirſute, the hairs ſimple, upright, and proceeding from little prominent points; ſtalk leaves none.

STALKS often ſeveral from the ſame root, one or two feet high, nearly upright, naked, inſtead of leaves having only ſhort, oval, pointed ſcales, edged with hairs at the ſitting on of the branches, very ſmooth, glaucous, ſomewhat ſtriated, tough, ſolid, and branched.

FLOWER-STALKS long, beſet with a few ſcales, towards the top a little thickend.

CALYX common to many florets, compoſed of ſcales which are of an oval ſhape, pointed, ſmooth, reddiſh at top, the keel edged with ſtiffiſh hairs. *fig.* 1.

COROLLA Compound, the florets laying one over another, hermaphrodite Florets equal and numerous; *each Floret* monopetalous, tubular at bottom and ſpreading at top, cut off at the extremity and terminating in five teeth, the tube hairy at top. *fig.* 2. 3.

STAMINA: five FILAMENTS, very fine; ANTHERÆ uniting in a tube, of a yellow colour.

PISTILLUM: GERMEN oval; STYLE thread-ſhaped, the length of the Stamina; STIGMATA two, turning back.

SEED oblong, reddiſh and finely grooved. *fig.* 5.

DOWN ſtanding on a foot-ſtalk and feathery.

RECEPTACLE chaffy, chaff long, ſhining, membranous, and hollow. *fig.* 4.

THIS ſpecies of *Hypochæris* receives its name of *radicata* from the length of its root, by which it is particularly diſtinguiſhed from the *Leontodon autumnale* LINN: or *Hieracium radice ſucciſa* of BAUHIN, in its fructification it agrees with the *Hypochæris glabra* already figured, ſize excepted, the ſame membranous *Paleæ* ſo obſervable in that plant ſerve equally to characterize the genus in this ſpecies, which is altogether as common with us as the other is ſcarce.

It grows on dry Banks, alſo on Heaths, in Meadows and Paſtures, and in the early part of the Summer its bloſſoms render it a very conſpicuous plant in thoſe ſituations.

In barren ſoils particularly on Heaths it is much ſmaller than the plant here figured, but its hairineſs and the ſize of its bloſſoms will always prevent its being miſtaken for the *Hypochæris glabra.*

SCUTELLARIA galericulata. Common HOODED WILLOW-HERB.

SCUTELLARIA *Lin. Gen. Pl.* DIDYNAMIA GYMNOSPERMIA. *Calyx* ore integro: poſt floreſcentiam clauſo, operculato.

Raii Syn. Gen. 14. SUFFRUTICES ET HERBÆ VERTICILLATÆ.

SCUTELLARIA *galericulata* foliis cordato-lanceolatis crenatis, floribus axillaribus. *Lin. Syſt. Vegetab. p.* 457. *Sp. Pl.* 835. *Fl. Suecic. n.* 538.

CASSIDA foliis oblonge cordatis crenatis verticillis nudis bifloris. *Haller Hiſt.* 280.

CASSIDA *galericulata. Scopoli Fl. Carniol.* 74.

LYSIMACHIA cærulea galericulata, ſeu Gratiola cærulea. *Bauh. pin.* 246.

LYSIMACHIA galericulata. *Gerard. emac.* 477.

GRATIOLA cærulea, ſ. latifolia major. *Park.* 221.

CASSIDA paluſtris vulgatior flore cæruleo. *Raii Syn. p.* 244. Hooded Willow-herb.

Hudſon. Fl. Angl. p. 265.

Lightfoot Fl. Scot. 320.

RADIX perennis, tenuis, geniculata, alba, repens.	ROOT perennial, ſlender, jointed, white and creeping.
CAULES pedales aut bipedales, erecti, quadrati, lateribus concaviuſculis, bilineatis, geniculati, rigiduli, ramoſi, ramis oppoſitis, ſuberectis.	STALKS from one to two feet high, upright, ſquare, the ſides a little hollow'd and mark'd with two lines, jointed, ſtiffiſh, branched, the branches oppoſite and nearly upright.
FOLIA oblongo-cordata, obtuſiuſcula, inæqualiter crenata, ſuperiora acuta.	LEAVES of an oblong heart ſhape, ſomewhat blunt, ſtanding on footſtalks, rather wrinkly and unequally crenated, thoſe on the top of the plant pointed.
BRACTEÆ duæ, minimæ, ſetaceæ, ad baſin pedunculi.	FLORAL-LEAVES two, very ſmall and ſetaceous, at the baſe of the flower ſtalk.
FLORES bini, ſecundi, cærulei, villoſi, ſubtus albidi.	FLOWERS growing in pairs, one way, of a blue colour, downy, and whitiſh underneath.
CALYX: PERIANTHIUM monophyllum, breviſſimum, tubulatum: ore truncato, ſquamula incumbente operculi inſtar clauſilis. *fig.* 1.	CALYX: a PERIANTHIUM of one leaf, very ſhort, and tubular; the mouth as if cut off, having a ſcale on it which ſeems to do the office of a lid. *fig.* 1.
COROLLA monopetala, ringens. *Tubus* breviſſimus, retrorſum flexus. *Faux* longa, compreſſa. *Labium ſuperius* concavum, trifidum: *lacinula media* concava, emarginata; *lateralibus* planis, acutiuſculis, intermediæ ſubjectis. *Labium inferius* latius, emarginatum, *fig.* 2.	COROLLA monopetalous and ringent. *Tube* very ſhort and bent backwards. *Throat* long, compreſſed. *upper Lip* hollow, and trifid, the *middle ſegment* hollow and nicked; the *ſide ones* flat, pointed and placed under the middle one, *Lower Lip* broad and nicked. *fig.* 2.
STAMINA: FILAMENTA quatuor alba, medio craſſiora et ad unum latus villoſula, duo breviora: ANTHERÆ parvæ, luteæ. *fig.* 3.	STAMINA: four white FILAMENTS, thickeſt in the middle and a little villous on one ſide, two ſhorter than the others; ANTHERÆ ſmall and yellow. *fig.* 3.
PISTILLUM: GERMEN quadripartitum; STYLUS ſuperne paululum incraſſatus, STIGMA ſimplex, incurvatum, acuminatum. *fig.* 4. 5. 6.	PISTILLUM: GERMEN divided into four parts, STYLE towards the top a little thickend; STIGMA ſimple, hooked and pointed. *fig.* 4. 5. 6.
PERICARPIUM nullum, *Calyx* bipartibilis, operculo clauſus, capſulæ vicem gerens.	SEED-VESSEL: none, the *Calyx* which ſplits into two parts, being cloſed by its lid anſwers the purpoſe of a capſule.
SEMINA 1 ad 4 ſubrotunda, pallide fuſca, ſuperficie ſcabra. *fig.* 9. 10.	SEEDS from one to four, roundiſh, of a pale brown colour, with a roughiſh ſurface. *fig.* 9. 10.
RECEPTACULUM ſeminum ſubrotundum. *fig.* 8.	RECEPTACLE of the ſeeds roundiſh. *fig.* 8.

BOTANY would certainly pleaſe more in the ſtudy of it, were the Genera as in the preſent inſtance diſtinctly characterized, the ſingular and curious conſtruction of the Calyx in this genus is very deſerving of a minute attention.

This ſpecies of Scutellaria grows commonly on the edges of rivers and ponds, and flowers in June, July and Auguſt.

It has a very encreaſing root, and hence ſhould cautiouſly be introduced into the Garden.

HALLER attributes to it the ſmell of Garlick which it ſcarcely merits.

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Scutellaria galericulata

Sansom Sculp.

Sanson sculp.

Betonica officinalis

BETONICA OFFICINALIS. WOOD BETONY.

BETONICA *Lin. Gen. Pl.* DIDYNAMIA GYMNOSPERMIA *Cal.* ariſtatus. *Corollæ* lab. ſuper. adſcendens, planiuſculum; *Tubus* cylindricus.
Raii Syn. Gen. 14. SUFFRUTICES ET HERBÆ VERTICILLATÆ.
BETONICA *officinalis* ſpica interrupta, corollarum lacinia labii intermedia emarginata. *Lin. Spec. Pl. p.* 810. *Fl. Suecic. n.* 515.
BETONICA foliis petiolatis, imis cordatis, ſuperioribus ovatis, crenatis, ſpica brevi, foliis inſidente. *Haller Hiſt. n.* 264.
BETONICA *officinalis Scopoli Fl. Carniol. p.* 422.
BETONICA purpurea. *Bauhin pin.*
BETONICA vulgaris flore purpureo *Parkinſon. p.* 238. *Gerard emac.* 714. *Raii Syn. p.* 238. Wood-Betony. *Hudſon. Fl. Angl. ed.* 2.
Lightfoot Fl. Scot. p. 311.

RADIX perennis, craſſitie minimi digiti, horizontalis, ſublignoſa, e luteo fuſca, tranſverſim rugoſa, fibris plurimis albidis, tenacibus, fibrilloſis, alte deſcendentibus inſtructa.

CAULIS pedalis aut ultra, erectus, plerumque ſimplex, in hortis ramoſus, tetragonus, angulis obtuſis, lateribus duobus magis excavatis, ſcabriuſculus pilis rigidulis, deorſum verſis, ſub appreſſis, geniculatus, geniculis ſuperne remotis.

FOLIA *radicalia* longe petiolata, oblongo-cordata, crenata, obtuſa, venoſo-rugoſa, ſubnuda, undique minutim punctata, punctis excavatis, margine ciliata, *caulina* oppoſita, anguſtiora, potius ſerrata quam crenata, reflexa, marginibus ſæpius revolutis.

FLORES purpurei, ſpicati.

SPICA terminalis, oblonga, e plurimis verticillis ſeſſilibus, approximatis compoſita, inferioribus ſæpius remotis.

BRACTEÆ plurimæ, verticillis ſubjectæ, lanceolatæ, calyce paulo breviores.

CALYX: PERIANTHIUM tubulatum, interne villoſum, turbinatum, quinquedentatum, ariſtatum, perſiſtens. *fig.* 1.

COROLLA monopetala, *Tubus* incurvus, infra glaber, albus, ſupra purpureus, extus et intus pubeſcens, calyce longior, *Labium* ſuperius ſubrotundum, integrum, planum, erectum, inferius trifidum; *lacinula media* latiori, ſubrotunda, emarginata. *fig.* 2.

STAMINA: FILAMENTA quatuor, ſubulata, alba, pubeſcentia, tubo longiora, quorum duo inferiora paulo breviora; ANTHERÆ e rubro purpuraſcentes, bilobæ, lobis ſubrotundis. *fig.* 3.

PISTILLUM: GERMEN quadripartitum; STYLUS ſubulatus, albidus, glaber, ſtaminibus paulo longior: STIGMA bifidum, *fig.* 4. 6.

NECTARIUM *fig.* 5.

SEMINA quatuor, fuſca, glabra, triquetra, latere exteriore convexo, interiore gibboſo. *fig.* 7.

ROOT perennial, the thickneſs of the little finger, horizontal, ſomewhat woody, of a yellowiſh brown colour, wrinkled tranſverſely, and furniſhed with numerous, long, whitiſh, tough, fibrous ſtrings.

STALKS a foot or more in height, upright, generally ſimple, in gardens branched, four-corner'd, the corners obtuſe, and two of the ſides more deeply hollowed than the others, roughiſh, the hairs, ſomewhat rigid, turning downward and preſs'd towards the ſtalk, jointed, the joints near the top of the ſtalk removed far from each other.

LEAVES *next the root* ſtanding on long footſtalks, of an oblong heart-ſhaped figure, bluntly notched, obtuſe, veiny and ſomewhat wrinkled, covered with few hairs, but dotted all over with ſmall hollow points, the edge fringed with hairs, thoſe *on the ſtalk*, oppoſite, narrower, and rather ſerrated than crenated, hanging down, the edges generally curled back.

FLOWERS purple, growing in a ſpike.

SPIKE terminal, oblong, compoſed of ſeveral ſeſſile cloſe whirls, the lowermoſt of which are moſt commonly remote from the others.

BRACTÆ numerous, placed under each whirl, lanceolate, and a little ſhorter than the Calyx.

CALYX: a PERIANTHIUM tubular, internally villous, broadeſt at top, having five teeth, which terminate in five long points, and are permanent. *fig.* 1.

COROLLA monopetalous; the *Tube* bending inwards, below ſmooth and white, above purple, downy both within and without, and longer than the calyx; the upper *Lip* roundiſh, entire, flat, and upright, the lower one divided into three ſegments, the middle one of which is broader than the others, roundiſh with a notch in the middle. *fig.* 2.

STAMINA: four FILAMENTS, tapering, white, and downy, longer than the tube, of which the two lowermoſt are ſomewhat the ſhorteſt; ANTHERÆ of a reddiſh purple colour, compoſed of two roundiſh lobes. *fig.* 3.

PISTILLUM: GERMEN divided into four parts; Style tapering, whitiſh, ſmooth, ſomewhat longer than the Stamina; STIGMA bifid. *fig.* 4. 6.

NECTARY *fig.* 5.

SEEDS four, brown, ſmooth, three corner'd, the outermoſt ſide convex the innermoſt gibbous. *fig.* 7.

ANTONIUS MUSA Phyſician to the Emperor AUGUSTUS wrote an entire book on this plant, whence it began to be held in ſuch eſteem in Italy as to occaſion the Proverb *vende la tonica et compra la Betonica* that is *ſell your coat and buy Betony* and when they wiſhed to extol a perſon they would ſay *Tu hai piu virtu, che non ha la Betonica, you have more virtues than Betony. Matth. in Dioſcor. p.* 943. *Raii Hiſt. p.* 550.

The leaves and flowers of Betony have an herbaceous roughiſh ſomewhat bitteriſh taſte accompanied with a very weak aromatic flavour. This herb has long been a favourite among writers on the Materia Medica who have not been wanting to attribute to it abundance of good qualities. Experience does not diſcover any other virtue in Betony than that of a mild corroborant; as ſuch, an infuſion or light decoction of it may be drank as tea, or a ſaturated tincture in rectified ſpirit given in ſuitable doſes, in laxity and debility of the viſcera, and diſorders proceeding from thence. The powder of the leaves, ſnuffed up the noſe, provokes ſneezing, and hence Betony is ſometimes made an ingredient in ſternutatory powders: this effect does not ſeem to be owing, as is generally ſuppoſed to any peculiar ſtimulating quality in the herb but to the rough hairs which the leaves are cover'd with. The roots of this plant differ greatly in quality from the other parts: their taſte is bitter and very nauſeous: taken in a ſmall doſe they vomit and purge violently, and are ſuppoſed to have ſomewhat in common with the roots of Hellebore. *Lewis's Diſp. p.* 103.

Betony grows abundantly in all our woods, about Town, and on ſome of the Heaths, flowering in July, Auguſt and September.

RAY obſerves that is is ſometimes found with white and ſometimes with fleſhcolour'd bloſſoms.

INULA PULICARIA. SMALL FLEABANE.

INULA *Lin. Gen. Plant.* SYNGENESIA POLYGAMIA SUPERFLUA, *Recept.* nudum. *Pappus* ſimplex. *Antheræ* baſi in ſetas duas deſinentes.

Raii. Syn. Gen. 7. HERBÆ FLORE COMPOSITO, SEMINE PAPPOSO NON LACTESCENTES, FLORE DISCOIDE.

INULA *Pulicaria* foliis amplexicaulibus undulatis, caule proſtrato, floribus ſubgloboſis. *Lin. Sp. Pl. p.* 1238.

ASTER foliis amplexicaulibus, undulatis, hirſutis, radiis breviſſimis. *Haller. Hiſt. n.* 80.

ASTER *Pulicarius. Scopoli Fl. Carn. n.* 1080.

CONYZA minor flore globoſo. *Bauhin pin.* 266.

CONYZA minima. *Gerard emac,* 482. *Raii. Syn. p.* 174. ſmall Fleabane.
Hudſon. Fl. Angl. p. 369.
Oeder. Fl. Dan. icon. 613.

RADIX annua, fibroſa, albida, articulata, plerumque curvata.	ROOT annual, fibrous, whitiſh, jointed, generally crooked.
CAULIS ſpithamæus, raro ultra pedalem, nobiſcum plerumque erectus, ramoſiſſimus, teres, purpuraſcens, pubeſcens, ſubflexuoſus; *Rami* alterni, cauli ſimiles.	STALK from ſeven inches to a foot in height, ſeldom more, with us generally upright, very much branched, round, purpliſh, downy, ſomewhat crooked; *Branches* alternate, and like the ſtalk.
FOLIA alterna, oblongo-lanceolata, amplexicaulia, hirſutula, undulata, tortuoſa.	LEAVES alternate, oblong, and lanceolate, embracing the ſtalk, ſlightly hairy, waved at the edges and twiſted.
FLORES parvi, numeroſi, hæmiſphærici, lutei, ſummitatibus ramulorum inſidentes, pedunculati; poſt nati ſupra primos eminentes.	FLOWERS ſmall, numerous, hemiſpherical and yellow, ſitting on the tops of the branches and having foot ſtalks, the laſt blown ſtanding conſiderably above the others.
CALYX communis imbricatus, ſquamæ numeroſæ, inæquales, ſublineares, erectæ, tomentoſæ.	CALYX common to many florets, ſcales lying one over another, numerous, almoſt linear, upright, equal and woolly.
COROLLA compoſita: *Corollulæ Hermaphroditæ* æquales, numeroſiſſimæ in dico, limbo quinquefido, erecto, extus minutiſſime glauduloſo, *fig.* 5, *Femineæ* ligulatæ, numeroſæ, confertæ in radio; carinâ ad lentem ſcabriuſculâ, *limbo breviſſimo*, plerumque tridentato. *fig.* 1.	COROLLA compound, *Hermaphrodite Florets* equal, exceedingly numerous in the center, the limb divided into five upright ſegments, and externally very minutely glandular, *fig.* 5. *Female Florets* in the circumference flat at the extremity, numerous, cloſe together, the keel or midrib underneath a little rough, the *limb very ſhort*, uſually terminating in three teeth. *fig.* 1.
STAMINA: FILAMENTA quinque, capillaria; ANTHERÆ flavæ, longitudine corollæ, ſingulis ſetis duabus tenuiſſimis ad baſin inſtructis. *fig.* 9, 10, 11.	STAMINA: five FILAMENTS, very fine; ANTHERÆ yellow, the length of the corolla, each furniſhed at bottom with two ſlender ſetæ or briſtles. *fig.* 9, 10. 11.
PISTILLUM: GERMEN Hermaphroditis et Feminæis oblongum, teres, album, pilis rigidulis ſubappreſſis hirſutum. *fig.* 2, 4 STYLUS corollâ longior; STIGMA bifidum, lacinis reflexis. *fig.* 3, 6.	PISTILLUM: GERMEN both in the Hermaphrodite and Female Florets oblong, round, white, hirſute with ſtiffiſh hairs which are ſomewhat preſs'd to it; *fig.* 2, 4, STYLE longer than the corolla; STIGMA bifid, the ſegments turning back. *fig.* 3. 6.
SEMEN oblongum, nigricans, hiſpidulum, teres, pappo ſimplici, rigidulo, fragili, longitudine ſeminis coronatum. *fig.* 8.	SEED oblong, blackiſh, round and a little hiſpid, crown'd with a ſimple, ſtiffiſh, brittle down, the length of the ſeed. *fig.* 8.
RECEPTACULUM nudum, punctis prominulis ſcabrum. *fig.* 7.	RECEPTACLE naked, roughiſh from little prominent points. *fig.* 7.

LINNÆUS in his *Genera Plantarum* informs us that the *Inula* is principally characterized by having two ſmall *Setæ* or *Briſtles* proceeding from the baſe of each *Anthera*, and that it is by this circumſtance in an eſpecial manner diſtinguiſhed from the Genus *Aſter*, yet notwithſtanding this, both *Haller* and *Scopoli* have thought proper to join it with that genus; although a peculiar character, it might perhaps be conſidered by them as too minute to found a Genus on, in this ſpecies it requires a good eye and ſome ſmall dexterity to diſcover them, yet they are ſufficiently viſible; independent of them however, there is on the face of the two genera ſuch an evident diſſimilarity that a ſtudent would never expect to find then arranged together

This ſpecies is not ſo common as the *dyſenterica*, nor is it like that a perennial.—It generally grows in places overflowed in the winter, on the borders of Ponds particularly in a ſtiffiſh ſoil and flowers in September.

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Inula Pulicaria

Sansom ſculp

Sisymbrium sylvestre

Sansom Sculp.

SISYMBRIUM SYLVESTRE. CREEPING WATER-ROCKET.

SISYMBRIUM *Linnæi. Gen. Plant.* TETRADYNAMIA SILIQUOSA.
Siliqua dehiſcens valvulis rectiuſculis. *Cal.* patens. *Cor.* patens.
Raii. Syn. Gen. 21. HERBÆ TETRAPETALÆ SILIQUOSÆ ET SILICULOSÆ.

SISYMBRIUM ſylveſtre ſiliquis declinatis oblongo-ovatis, foliolis lanceolatis ſerratis. *Lin. Syſt. vegetab. p.* 497.

SISYMBRIUM foliis pinnatis, pinnis dentatis diſſitis *Haller. Hiſt. n.* 485.

SISYMBRIUM Roripa? *Scopoli Fl. Carniol. p.* 823.

SISYMBRIUM paluſtre repens Naſturtii folio. *Tournefort plant autour de' Paris p.* 37.

ERUCA ſylveſtris minor luteo parvoque flore *Bauhin pin.* 98.

ERUCA quibuſdam ſylveſtris repens, floſculo luteo *Bauh. Hiſt.* 2 *p.* 866.

ERUCA aquatica *Ger. emac.* 248. *Park.* 1242. *Raii. Syn.* 297. Water-Rocket. *Raii. Hiſt. p.* 808.
Hudſon. Fl. Angl. ed. 2. *p.* 296.
Lightfoot Fl. Scot p. 351.

RADIX perennis, albida, tenuis, inſigniter repens, plurimis germinibus tuberculoſa.	ROOT perennial, whitiſh, ſlender, remarkably creeping, thickly beſet with germs which give it a knobbed appearance.
CAULES plurimi, pedales, ſubericti, debiles, interdum purpuraſcentes, glabri, angulato-ſtriati, ramoſi, ramis hirſutulis.	STALKS numerous, a foot high, nearly upright, weak, ſometimes purpliſh, ſmooth, ſomewhat angular and finely grooved, branched, the branches very ſlightly hairy.
FOLIA radicalia pinnatifida, pinnis ſubovatis, dentato-ſerratis, lævia, petiolo purpuraſcente, caulina alterna, ſubpinnatifida, pinnis lanceolatis, ſerratis, integriſve.	LEAVES next the root pinnatifid, the pinnæ or ſmall leaves ſomewhat oval, toothed or ſawed, and ſmooth, the leaf ſtalk purpliſh, leaves on the ſtalk alternate, ſerrated or entire.
PETIOLUS ſuperne canaliculatus.	FLOWER-STALK hollowed above.
FLORES parvi, lutei.	FLOWERS ſmall and yellow.
PEDUNCULUS communis multiflorus, flexuoſus, *Pedunculi proprii* alterni, patentes, aut ſurſum paululum curvati, ſiliquâ plerumque longiores.	FLOWER-STALK: the general flower-ſtalk bent in and out and ſupporting many flowers, the partial ones alternate, ſpreading almoſt horizontally, or bent a little upwards, generally longer than the pod.
CALYX: PERIANTIUM tretraphyllum, foliolis ovatis, concavis, erectis, æqualibus, flaveſcentibus, *fig.* 1.	CALYX: a PERIANTHIUM of four leaves, which are oval, hollow, upright, equal and yellowiſh. *fig.* 1.
COROLLA: PETALA quatuor, unguiculata, obtuſa, patentia, calyce paulo longiora, *fig.* 2.	COROLLA: four PETALS each having a claw, and blunt at the point, ſpreading and a little longer than the calyx, *fig.* 2.
NECTARIUM: Glandulæ quatuor, ſaturate virides, in circulum coadunatæ.	NECTARY: four glands, of a deep green colour, united in a circle.
STAMINA: FILAMENT ſex, quorum duo breviora, ſubulata, flava; ANTHERÆ incumbentes, *fig.* 3.	STAMINA: ſix filaments, two of which are ſhorter than the others, tapering, and yellow, ANTHERÆ laying acroſs the Filaments. *fig.* 3.
PISTILLUM: GERMEN oblongum, teres, longitudine ſtaminum, *fig.* 5, STYLUS breviſſimus; STIGMA capitatum, villoſum. *fig.* 4.	PISTILLUM: GERMEN oblong, round, the length of the ſtamina *fig.* 5, STYLE very ſhort; STIGMA forming a little head and villous. *fig.* 4.
PERICARPIUM: SILIQUA brevis, vix ſemuncialis, teres, ſurſum curvata, plerumque abortiva. *fig.* 6.	SEED-VESSEL a ſhort Pod, ſcarce half an inch long, round, bending upwards, generally abortive. *fig.* 6.

TOURNEFORT in his *Hiſtoire des Plantes des environs de Paris*, has deſcribed our plant with much accuracy, it appears from his account to be plentifull not only along the banks of the *Seine*, but in the the courts before Houſes, and in moſt moiſt ſituations, it is alſo deſcribed by RAY, in his *Hiſt. Plant*; with us it is not of ſuch general growth but in thoſe ſituations in which it does occur we find it in great abundance; the watery part of *Tothill Fields Weſtminſter* is over run with it; I ſcarcely know any plant that requires to be introduced into a Garden with more caution than this, eſpecially if the ground be moiſt.

It continues to flower from June to September. Both RAY and TOURNEFORT mention the ſeeds of this plant, it is probable they found it growing in a dry ſituation favourable to their ripening, the ſeed veſſells which I have had an opportunity of ſeeing have all proved abortive, which I ſuſpect is natural to the plant as it encreaſes ſo conſiderably by its root.

This plant affords no ſtriking generic character, but may be referred to almoſt any Genus in the Order.

SAGINA PROCUMBENS. PROCUMBENT PEARLWORT.

SAGINA *Linnæi Gen. Pl.* TETRANDRIA TETRAGYNIA.

Cal. 4-phyllus. *Petala.* 4. *Caps.* 1-locularis, 4-valvis, polyſperma.

Raii Syn. Gen. 24. HERBÆ PENTAPETALÆ VASCULIFERÆ.

SAGINA *procumbens* ramis procumbentibus. *Lin. Syſt. Vegetab. Sp. Plant.* 185. *Fl. Suec. n.* 155.

ALSINE tetraſtemon foliis connatis, lanceolatis. *Haller hiſt. n.* 861.

SAGINA *procumbens. Scopoli Fl. Carn. n.* 183.

SAXIFRAGA anglicana alſinefolia. *Gerard emac.* 568.

CARYOPHYLLUS minimus muſcoſus noſtras. *Parkinſon.* 1340.

ALSINELLA muſcoſo flore repens. *Cat. Giſs. Raii. Syn. p.* 345. Pearl-wort, Chickweed Breakſtone.

Hudſon. Fl. Angl. ed. 2. *p.* 73.

Lightfoot. Flor. Scot. p. 125.

RADIX annua plerumque, in locis vero umbroſis ſæpe perennat.	ROOT generally annual, but in ſhady places often perennial.
CAULES plurimi, in umbroſis humentibus repentes, in aridis erecti, bi, triunciales, teretes, glabri, geniculati, ramoſi, proliferi.	STALKS numerous, in ſhady moiſt places creeping, in dry ſituations upright, two or three inches in length, round, ſmooth, jointed, branched and proliferous.
FOLIA ſemunciam longa, oppoſita, patentia, connata, ſubulata, mucronata, glabra, ſaturate viridia, faſciculatim ramos terminantia.	LEAVES half an inch long, oppoſite, ſpreading, joining at bottom, narrow, and tapering, terminated by a fine hair-like point, ſmooth, of a deep green colour, and terminating the branches in cluſters.
PEDUNCULI axillares, plerumque uniflori, alterni, foliis longiores, priusquam flores aperiuntur apice nutantes.	FLOWER-STALKS growing from the alæ of the leaves, uſually ſupporting one flower, longer than the leaves, before the bloſſoms open nodding at top.
CALYX: PERIANTHIUM tetraphyllum, foliolis ovatis, concavis, perſiſtentibus, patentibus, *fig.* 1.	CALYX: a PERIANTHIUM of four leaves, which are oval, hollow, permanent, and ſpreading, *fig.* 1.
COROLLA: PETALA quatuor, minima, calyce triplo breviora, alba, patentia, ſæpe manca, *fig.* 2.	COROLLA: four PETALS, very minute, three times ſhorter than the calyx, white, ſpreading, and often imperfect, *fig.* 2.
STAMINA: FILAMENTA quatuor, capillaria; ANTHERÆ ſubrotundæ, flavæ, *fig.* 3.	STAMINA: four FILAMENTS very fine; ANTHERÆ roundiſh and yellow, *fig.* 3.
PISTILLUM: GERMEN ſubgloboſum; STYLI quatuor, ſubulati, recurvi, pubeſcentes; STIGMATA ſimplicia, *fig.* 4.	PISTILLUM: GERMEN ſomewhat globular; STYLES four, tapering, bending back a little, with an appearance of down on them; STIGMATA ſimple, *fig.* 4.
PERICARPIUM: CAPSULA ſubovata, pellucida, calyce patulo inſidens, unilocularis, quadrivalvis, *fig.* 5.	SEED-VESSEL: a CAPSULE ſomewhat oval, and pellucid, ſitting on the ſpreading calyx, having one cavity and four valves, *fig.* 5.
SEMINA numeroſa, minima, rufa, receptaculo affixa.	SEEDS numerous, very ſmall, of a reddiſh brown colour, and affixed to a receptacle.

Few plants are more liable to miſlead the young Botaniſt than this, as there are few that aſſume ſo great a variety of appearance, in moiſt ſhady ſituations, eſpecially if growing on the ground, it creeps and forms a thick cloſe turf and looks like a patch of graſs, the leaves are of a fine deep green and rather fleſhy, on walls eſpecially if it be the ſhady ſide, it frequently grows upright even to the height of ſix inches, and is in every reſpect more ſlender, on walls that are expoſed to the ſun it ſeldom grows more than two inches high, under all this diverſity, the ſingular appearance of its ſeed veſſels will in general eaſily diſtinguiſh it, being placed on the center of the expanded permanent calyx like a cup on a ſaucer.

Its petals are very minute, generally imperfect and ſometimes wanting.

It is not unuſual to meet with it, having one fifth part of its fructification encreaſed.

Being fond of a gravelly ſoil it often becomes a troubleſome weed in gravel walks.

It continues to flower during the whole of the ſummer.

In the leaves we have a good example of the *folium mucronatum.*

Sagina procumbens

Geranium pyrenaicum

GERANIUM pyrenaicum. perennial DOVES-FOOT CRANESBILL.

GERANIUM *Lin. Gen. Pl.* MONADELPHIA DECANDRIA.
Monogyna. *Stigmat.* 5. *Fructus* roſtratus, 5-coccus.
Raii Syn. Gen. 24. HERBÆ PENTAPETALÆ VASCULIFERÆ.

GERANIUM *pyrenaicum* pedunculis bifloris, foliis inferioribus quinquepartito-multifidis, rotundatis; ſuperioribus trilobis, caule erecto. *Linn. Syſt. Vegetab. p.* 514.

GERANIUM pedunculis bifloris, foliis multifidis, laciniis obtuſis, inæqualibus, petalis bifidis. *Gerard. Fl. Gallo-prov. p.* 434. *fig.* 16. 2. *Hudſon Fl. Angl. ed* 2. *p.* 302. *Lightfoot Fl. Scot. p.* 367.

RADIX perennis.	ROOT perennial.
CAULES ſuberecti, pubeſcentes, pedales, et ultra, ramoſi, geniculati, geniculis paululum incraſſatis.	STALKS nearly upright, and downy, a foot high, or more, branched, and jointed, the joints a little ſwelled.
FOLIA *radicalia* rotundata, hirſutula, venoſa, margine ſæpe rubicunda, ſeptemlobata, lobis ſubtrifidis, laciniis obtuſiuſculis, mucronatis, intermedia majore; *caulina* oppoſita, lobis paucioribus, iiſque poſtice magis remotis.	LEAVES *of the root* of a roundiſh figure, ſomewhat hirſute, and veiny, the edge often reddiſh, divided into ſeven lobes, each of which is ſubdivided into about three bluntiſh ſegments, terminated by a ſhort point, the middle ſegment the largeſt; thoſe *of the ſtalk* oppoſite, compoſed of fewer lobes, and thoſe more widely ſeparating behind.
PETIOLI *radicales*, prælongi, teretes, pubeſcentes, ſi diſcindantur extremitatibus ſuis puncta quatuor alba exhibentes.	LEAF-STALKS *next the root* very long, round, and downy, exhibiting if cut acroſs four white dots on their extremities.
STIPULÆ ad ſingula genicula quaternæ, utrinque binæ, genicula ambientes, bifidæ, vel trifidæ, rubentes, perſiſtentes.	STIPULÆ: four at each joint, two on each ſide, ſurrounding the joint, divided into two or three ſegments, of a reddiſh colour and permanent.
PEDUNCULI pubeſcentes, bifidi, biflori, Pedicelli longitudine pedunculi, baſi ſtipulis quaternis minoribus notati.	FLOWER-STALKS downy, bifid, ſupporting two flowers, Partial flower-ſtalks the length of the general one, and furniſhed at bottom with four ſmaller ſtipulæ.
FLORES majuſculi, purpurei, antequam aperiuntur nutantes, poſtea erecti.	FLOWERS largiſh and purple, before they open hanging down, afterwards becoming upright.
CALYX: PERIANTHIUM quinquepartitum, laciniis ovato-lanceolatis, brevi mucrone fuſco obtuſiuſculo terminatis, trinervibus, ciliatis, ſubviſcoſis. *fig.* 1.	CALYX: a PERIANTHIUM divided into five oval pointed ſegments, terminated by a ſhort brown bluntiſh point, having three ribs, edged with hairs, and ſlightly clammy. *fig.* 1.
COROLLA: PETALA quinque, calyce duplo longiora, obcordata, apice bifida, baſi villoſa. *fig.* 2.	COROLLA: five PETALS twice the length of the calyx, inverſely heart-ſhaped, bifid at top, at bottom villous. *fig.* 2.
NECTARIUM: *Glandulæ* quinque flaveſcentes ad baſin Staminum. *fig.* 5.	NECTARY: five yellowiſh *Glands* placed at the bottom of the Stamina. *fig.* 5.
STAMINA: FILAMENTA decem, alba, apice purpuraſcentia; ANTHERÆ cœruleſcentes; POLLEN album, globoſum. Antheræ extus poſitæ pollen præ cæteris dimittunt, et dein decidunt, nunquam vero abortiunt. *fig.* 3.	STAMINA: ten FILAMENTS, purpliſh at top, ANTHERÆ blueiſh; POLLEN white and globular. The outer row of antheræ ſhed their pol en firſt and then drop off, but are never infertile. *fig.* 3.
PISTILLUM: GERMEN pentagonum, viride; STYLUS ſulcatus; STIGMATA quinque, longitudine Antherarum. *fig.* 4.	PISTILLUM: GERMEN five corner'd, of a green colour; STYLE grooved; STIGMATA five, the length of the Antheræ. *fig.* 4.
FRUCTUS pentacoccus, *Arillus* carinatus, hirſutulus. *fig.* 6.	FRUIT compoſed of five prominent ſeeds, *ſeed-covering* mark'd with a prominent line, and ſlightly hirſute. *fig.* 6.
SEMEN ovatum, fuſcum, læve.	SEED oval, brown, and ſmooth.

The great ſimilarity exiſting between the preſent Geranium, the *molle*, and *rotundifolium*, has occaſioned no ſmall confuſion among the ſynonyms of Authors, which as Haller obſerves, are covered with impenetrable obſcurity.

Neverthleſs an attentive obſervance of the plants themſelves, as they grow wild, will ſhew that they may be diſtinguiſhed without any great difficulty. In treating of the *molle* which is the moſt liable to be miſtaken for this ſpecies, I obſerved that it was ſubject to many varieties, particularly in the colour of its bloſſoms, that its ſtalks, always procumbent when the plant grew alone, were liable to grow upright among graſs and herbage, and that in ſome rich paſtures the flowers approached almoſt to the ſize of thoſe of the preſent plant.—Having cultivated moſt of our Engliſh Geraniums I can with certainty declare that the *molle* is ſtrictly an annual, and the *pyrenaicum* perennial, this then conſtitutes an eſſential difference between the two, beſides, the *pyrenaicum* uſually grows to twice the ſize, its bloſſoms alſo are more than thrice as large, it is never procumbent but always nearly upright, and it is likewiſe, with us at leaſt, a much ſcarcer plant.

Mons: GERARD in his *Flora Galloprovincialis* has the merit of firſt giving an accurate deſcription and figure of this plant, he ſuppoſes it to be the *Geranium columbinum perenne pyrenaicum maximum* of TOURNEFORT whence LINNÆUS has given it the name of *pyrenaicum*; Mr. HUDSON in the firſt edition of his *Flora Anglica* called it *perenne*, but in the laſt he has adopted the name of LINNÆUS, I have hitherto found this plant growing wild in one ſpot only, viz. in the dry part of the paſturage in *Batterſea* Fields, on the left hand ſide of the road as you paſs from *London* by the Thames ſide, betwixt the Red Houſe and Chelſea Bridge.

In Chelſea Garden it comes up as a weed and is there found alſo with white flowers.

It blows in June and July.

MALVA ROTUNDIFOLIA. DWARF MALLOW.

MALVA *Linnæi Gen. Pl.* MONADELPHIA POLYANDRIA.

Cal. duplex: exterior triphyllus. *Arilli* plurimi, monoſpermi.

Raii Syn. Gen. 15. HERBÆ SEMINE NUDO POLYSPERMÆ.

MALVA *rotundifolia* caule proſtrato, foliis cordato-orbiculatis obſolete quinquelobis, pedunculis fructiferis declinatis. *Lin. Syſt. Vegetab. p.* 520.

MALVA caule repente, foliis cordato orbicularibus, obſolete quinquelobis. *Haller hiſt.* n. 1070.

MALVA rotundifolia. *Scopoli Fl. Carn.* n. 858.

MALVA ſylveſtris folio rotundo. *B. pin.* 314.

MALVA ſylveſtris pumila. *Ger. em.* 930.

MALVA ſylveſtris minor. *Park.* 299. *Raii ſyn.* 251. Small wild Mallow or Dwarf Mallow.

Hudſon. Fl. Angl. ed. 2. *p.* 307.

Lightfoot. Flor. Scot. p. 375.

RADIX annua, in terram alte deſcendens, albida.

CAULES plures ex una radice, proſtrati, dodrantales, etiam pedales et ultra, teretes, pubeſcentes, extus purpuraſcentes.

FOLIA alterna, petiolata, utrinque minutim pubeſcentia, ſcabriuſcula, ſubrotundo reniformia, quinque vel ſeptemloba; lobis rotundatis, margine ſerrata, ſubtus ſubſeptemnervia, extrema ſenſim majora.

PETIOLI teretes, elongati, pubeſcenti-ſcabri, ſupra ſulcati.

STIPULÆ duæ, oppoſitæ, parviuſculæ, lanceolatæ, acutæ, ciliatæ, pubeſcentes.

FLORES plerumque gemini, pedunculati, axillares, pedunculis petiolis brevioribus, filiformibus, teretibus, pubeſcentibus, ſæpius inæqualibus.

CALYX: PERIANTHIUM duplex, exterius triphyllum; foliolis lineari ſubulatis, obtuſis; interius campanulatum, pubeſcenti ſcabrum, quinquefidum; laciniis ovato acutis, erectis, carinatis, margine ſerratis, ſubundulatis. *fig.* 1.

COROLLA alba, venis rubellis picta, PETALA quinque, lineari cuneiformia, obtuſa, emarginata, calyce paulo longiora, erecta ſubſeſſilia. *fig.* 2.

STAMINA: FILAMENTA plurima, monadelpha, columna cylindrica, glabra, corolla breviore, ſuperne breviter libera.

ANTHERÆ parvæ, ſubrotundæ, echinatæ, undique nutantes. *fig.* 3.

PISTILLUM: GERMEN orbiculatum, depreſſum, infra receptaculum corollæ; STYLI plures, ſubulati, erecti, vix pubeſcentes, longitudine ſtaminum; STIGMATA ſimplicia. *fig.* 4.

SEMINA ut in ſylveſtri, at minora. *fig.* 5.

ROOT annual, ſtriking deep into the earth, of a whitiſh colour.

STALKS ſeveral from one root, laying proſtrate on the ground, from nine to twelve inches in length or more, round, downy, and moſt commonly purpliſh.

LEAVES alternate, ſtanding on footſtalks, covered on both ſides with a fine down, ſlightly rough, of a roundiſh, kidney-ſhaped form, uſually divided into five or ſeven roundiſh lobes, ſerrated at the edge, having generally on the under ſide ſeven ribs, thoſe fartheſt from the root gradually largeſt.

LEAF-STALKS round, long, downy, with a ſlight roughneſs, grooved on the upper ſide.

STIPULÆ two, oppoſite, ſmalliſh, lanceolate, pointed, edged with hairs and downy.

FLOWERS generally growing in pairs, connected to flower ſtalks, which ſpring from the alæ of the leaves, and which are ſhorter than the leaf-ſtalks, thread ſhaped, round, downy, and for the moſt part unequal.

CALYX: a double PERIANTHIUM, the outer one compoſed of three linear tapering leaves, bluntiſh at the point; the inner one bell-ſhaped, downy, with a ſlight roughneſs, divided into five ſegments, of an oval pointed ſhape, upright, keel'd, the edge ſerrated and ſlightly waved. *fig.* 1.

COROLLA white, ſtriped with reddiſh veins, PETALS five, of a narrow wedge ſhape, blunt, notched at the extremity, a little longer than the calyx, upright, nearly ſeſſile. *fig.* 2.

STAMINA: FILAMENTS numerous, united into one body, the column cylindrical, ſmooth, ſhorter than the corolla, at top ſhort and looſe.

ANTHERÆ ſmall, roundiſh, prickly, hanging down all around. *fig.* 3.

PISTILLUM: GERMEN orbicular, flatten'd, placed below the receptacle of the corolla; STYLES numerous, tapering, upright, ſcarcely downy, the length of the ſtamina; STIGMATA ſimple. 4.

SEEDS as in the ſylveſtris, but ſmaller. *fig.* 5.

We meet with this ſpecies of Mallow on dry Banks, alſo under Pales and Walls in great plenty, it is obviouſly diſtinguiſhed from the common mallow by having a procumbent ſtalk, and ſmall white flowers ſlightly tinged with red.

It continues to blow from June to September.

HALLER and SCOPOLI deſcribes the ſtalk as creeping, our plant certainly does not creep.

Malva rotundifolia

Sansom sculp

Braſsica muralis

BRASSICA MURALIS. WILD ROCKET.

BRASSICA *Linnæi Gen. Pl.* Tetradynamia Siliquosa.

Cal. erectus, connivens. *Sem* globoſa. *Glandula* inter ſtamina breviora et piſtillum, interque longiora et calycem.

Raii Syn. Gen. 21. Herbæ Tetrapetalæ Siliquosæ et Siliculosæ.

BRASSICA *muralis* ſoliis lanceolatis ſinuato ſerratis læviuſculis, caule erecto glabro. *Hudſon Fl. Angl. p.* 290.

ERUCA foliis glabris, pinnatis, pinnis linearibus difformibus. *Haller hiſt.* n. 461.

ERUCA ſylveſtris. *Matt. in Dioſc. p.* 531. cum icone.

ERUCA tenuifolia perennis flore luteo. *J. B.* 2. 861.

ERUCA ſylveſtris. *Gerard emac.* 246.

ERUCA ſylveſtris vulgatior. *Parkinſon.* 818.

ERUCA ſylveſtris major vulgatior fœtens. *Hiſt. Ox.* II. 230. *Raii Syn. p.* 296. Wild Rocket.

RADIX perennis, ſublignoſa, intra muros profunde penetrans, vix evellanda.	ROOT perennial, ſomewhat woody, penetrating deep into the walls, ſcarcely to be pulled out.
CAULIS ſeſquipedalis, erectus, ramoſus, teres, baſi ſublignoſus, perennans.	STALK a foot and a half high, upright, branched, round, at bottom ſomewhat woody and perennial.
FOLIA pinnatifido-laciniata, glabra, patentia, odoris ingrati.	LEAVES pinnatifid and jagged, ſmooth, ſpreading, of a diſagreeable ſmell.
CALYX priuſquam flores aperiuntur quaſi bicornis, cornibus brevibus, pilo uno, alterove inſtructis; flore aperto tetraphyllus, foliolis oblongis, concavis, duobus cum apicibus gibboſis deorſum tendentibus, duobus erectis. *fig.* 1. 2. 3.	CALYX before the flowers are expanded has the appearance of having two horns, which are ſhort, and furniſhed with one, or two hairs; on the expanſion of the petals, it is compoſed of four, oblong, hollow leaves, two of which, being gibbous at top hang down, and the other two ſtand upright. *fig.* 1. 2. 3.
COROLLA: Petala quatuor, majuſcula, calyce duplo longiora, unguiculata, erecta, flava. *fig.* 4.	COROLLA four Petals, rather large, twice the length of the calyx, clawed, upright, and of a yellow colour. *fig.* 4.
NECTARIUM: *Glandulæ* quatuor, duo extra baſin filamentorum præter morem longæ, apice extrorſum incurvatæ, duo intra baſin filamentorum breviora, ſubrotunda. *fig.* 7. 8.	NECTARY: four *Glands*, two placed on the outſide of the baſe of the filaments, unuſually long, externally bent in at top, two placed on the inſide of the baſe of the filaments, ſhorter and roundiſh. *fig.* 7. 8.
STAMINA: Filamenta ſex, quorum duo breviora, ſubulata, erecta, flaveſcentia; Antheræ incumbentes, ſubſagittatæ. *fig.* 5.	STAMINA: ſix Filaments, two of which are ſhorter than the reſt, tapering, upright and yellowiſh; Antheræ laying acroſs the filaments, and ſomewhat arrow-ſhaped. *fig.* 5.
PISTILLUM: Germen oblongum, tenue; Stylus breviſſimus; Stigma capitatum. *fig.* 6.	PISTILLUM: Germen oblong, ſlender, *Style* very ſhort; Stigma forming a little head. *fig.* 6.
PERICARPIUM: *Siliqua* ſeſquiuncialis, teres, utrinque linea prominenti notata. *fig.* 9.	SEED-VESSEL: a *Pod* about an inch and a half long, round, mark'd on each ſide with a prominent line. *fig.* 9.
SEMINA plurima, minuta, fuſca, ſubovata, compreſſiuſcula.	SEEDS numerous, ſmall, brown, ſomewhat oval, and a little flatten'd.

Matthiolus, one of the firſt Botaniſts who has taken notice of this plant, calls it *Eruca ſylveſtris*, and has given us a tolerable good figure of it, ſufficient at leaſt with his annexed deſcription to identify it: Caspar Bauhine quotes this plant from Matthiolus, with this addition, *Eruca ſylveſtris major lutea caule aſpero*, now there certainly is no appearance either in the plant, in Matthiolus's deſcription, or figure, which juſtifies thoſe expreſſions, for as Tournefort obſerves in his *Hiſt. des plantes des environs de Paris* the branches have ſometimes a few ſmall hairs on them but by no means can they be called rough, this deſcription of Bauhine's has therefore created much confuſion, nor is the name of J. Bauhine which Tournefort has adopted perhaps totally free from objection, the term *tenuifolia* though proper when placed as the oppoſite to *latifolia*, in the preſent inſtance is liable to miſlead.

Did we entertain the leaſt idea of the inſufficiency of Matthiolus's, figure or deſcription, Tournefort and Ray have deſcribed it with ſo much accuracy as to leave no doubt of their being well acquainted with it, they both particularize its diſagreeable ſmell, Tournefort's expreſſions are *ſon odeur approche de celle des huiles fétides rectifiées ſur la chaux vive*; Rays *odor totius plantæ fætidus et ingratus, noſtris ſaltem naribus*; if any thing more were wanting to their deſcriptions we might add ſome peculiarities in its fructifications, as that the Calyx before it opens appears to have two little ſhort horns from each of which iſſue one or more fine hairs, when the flower is expanded two of the leaves of the Calyx ſtand almoſt upright, while the other two bend back, and that two of the glands are uncommonly long.

Mr. Hudson in the firſt edition of his *Flora Anglica*, calls this plant *Braſſica Erucaſtrum*, in the ſecond edition he has made it a new ſpecies, it certainly does not accord with Linnæus's ſpecific deſcription of that plant, its fructifications denote it to be a *Braſſica*, and it does not agree with any of the other ſpecies of *Braſſica* in Linnæus, I have therefore adopted Mr. Hudson's name.

The Garden Rocket *Braſſica Eruca* was formerly much cultivated in Gardens for medicinal uſe and for Sallads; but is at preſent leſs common, the ſeeds have a pungent taſte of the muſtard kind but weaker, they have long been celebrated as aphrodiſiacs, and may, probably, have in ſome caſes a title to this virtue in common with other acrid plants, and this as Ray obſerves, was not only the opinion of the Phyſicians but alſo of the Poets of former times, which he illuſtrates by the following quotations:

Martial. *Et Venerem revocans Eruca morantem.*
Columella. *Excitat ad Venerem tardos Eruca maritos.*
Ovid. *Nec minùs Erucas jubeo vitare ſalaces.*

The *Braſſica muralis* grows very plentifully in and about London, and is I believe of general growth on moſt of the old Walls and Caſtles throughout England, with us in particular it grows on the walls around the Tower, at the back of Bedlam, and near Hyde-Park, it is alſo frequently found among rubbiſh, it flowers during the greateſt part of the ſummer.

TRIFOLIUM AGRARIUM. HOP TREFOIL.

TRIFOLIUM *Lin. Gen. Pl.* DIADELPHIA DECANDRIA.
Flores ſubcapitati. *Legumen* vix calyce longius, non dehiſcens, deciduum.
Raii Syn. Gen. 23. HERBÆ FLORE PAPILIONACEO SEU LEGUMINOSÆ.
TRIFOLIUM *agrarium* ſpicis ovalibus imbricatis: vexillis deflexis perſiſtentibus, calycibus nudis, caule erecto. *Lin. Syſt. Veg. p.* 574. *Sp. Pl.* 1087. *Fl. Suecic.* 671.
TRIFOLIUM ſpicis ovatis denſiſſimis, ſtrepentibus, caulibus diffuſis. *Haller. hiſt.* n. 363.
TRIFOLIUM *agrarium. Scopoli Fl. Carn.* n. 931.
TRIFOLIUM pratenſe luteum capitulo Lupuli vel agrarium. *Bauh. pin.*
TRIFOLIUM luteum minimum. *Ger. emac.* 1186. *Raii Syn.* p. 330. Hop-Trefoil.
Oeder. Fl. D. t. 558.
Hudſon. Fl. Angl. ed. 2. p. 328.
Lightfoot. Fl. Scot. p. 409.

RADIX annua.

CAULIS palmaris aut dodrantalis, plerumque diffuſus, teres, villoſus, ramoſus, fruticuloſus, ſæpe rubens.

STIPULÆ binæ, ovato-acuminatæ, ſtriatæ.

FOLIA oblongo-cordata, plerumque nuda, nervoſa, nervis plurimis, rectis, acute ſerrata.

PETIOLI teretes, foliis ipſis paulo breviores.

PEDUNCULI erecti, nudi, petiolis multo longiores.

FLORES quadraginta circiter, imbricatim denſiſſime glomerati, vix manifeſte pedicellati, capituli majuſculi, ſubrotundi, primum lutei, demum fuſci.

CALYX: PERIANTHIUM minimum, membranaceum, flaveſcens, a corolla ægre diſtinguendum, aut ſeparandum, quinquedentatum, dentibus duobus ſuperioribus breviſſimis, tribus inferioribus ſetaceis, piloſis, corolla brevioribus. *fig.* 1.

COROLLA calyce duplo longior, perſiſtens, *Vexillum* ſuberectum, nervoſum, margine ſerratum, peracta floreſcentia magnitudine augetur, et deorſum flectitur; *Alæ* conniventes, vexillo breviores: *Carina* minima, intra alas, iiſque brevior. *fig.* 2.

PERICARPIUM: LEGUMEN corolla tectum, membranaceum, monoſpermum, parietibus tenuiſſimis, cito corrumpentibus, relicta tantum ſutura cum mucrone. *fig.* 4.

SEMEN unicum, nitidum, fuſcum ſive aurantiacum. *fig.* 5.

ROOT annual.

STALK from ſix to nine inches in length, generally ſpreading, round, villous, branched, a little hard or ſhrubby, often of a reddiſh colour.

STIPULÆ growing in pairs, oval, pointed, and ſtriated.

LEAVES of an oblong heart-ſhape, generally ſmooth, finely rib'd, the ribs ſtrait, ſharply ſawed about the margin.

LEAF-STALKS round, and ſomewhat ſhorter than the leaves themſelves.

FLOWER-STALKS upright, naked, much longer than the leaf-ſtalks.

FLOWERS about forty, ſtanding on very ſhort foot-ſtalks, which are ſcarce perceptible, laying very cloſe one over the other, and forming largeiſh heads of a roundiſh ſhape, which at firſt are yellow, and afterwards brown.

CALYX: a PERIANTHIUM very minute, membranous, yellowiſh, with difficulty diſtinguiſhed or ſeparated from the corolla, having five teeth, of which the two uppermoſt are very ſhort, the three lowermoſt ſetaceous, hairy, and ſhorter than the corolla. *fig.* 1.

COROLLA twice the length of the calyx, permanent; *Standard* nearly upright, rib'd, the edge ſerrated, the flowering being over, it becomes encreaſed in ſize and turns back; *Wings* cloſing, ſhorter than the ſtandard; *Keel* very ſmall, within the wings and ſhorter than them. *fig.* 2.

SEED-VESSEL: a POD covered with the corolla, membranous, containing one ſeed, the ſides being very thin, ſoon decay, and leave nothing but the ſuture with its point. *fig.* 4.

SEED ſingle, ſhining, of a brown or orange colour. *fig.* 5.

The name of *Hop Trefoil* has been with much propriety beſtowed on this plant, as the little heads formed by the flowers are larger and more reſembling the hop than thoſe of any of the other ſpecies.

We are carefully to diſtinguiſh it from the *Trifolium procumbens*, than which it is in every reſpect larger, and leſs procumbent.

It is by no means an uncommon plant in dry paſtures, on the borders of fields, and in gravelly ſoils; in ſome fields I have obſerved it naturally to form a conſiderable part of the Farmers crop, which though a ſmall one was judged to make excellent fodder.

It is perhaps one of thoſe plants which merits the further attention of the Huſbandman.

June and July are the months in which it uſually flowers.

SCOPOLI doubts, and apparently with great propriety, whether the *Trifolium ſpadiceum* of LINNÆUS be a ſpecies diſtinct from this.

Trifolium agrarium

Sansom Sculp

Sempervivum tectorum

Sansom Sculp

SEMPERVIVUM TECTORUM. HOUSELEEK.

SEMPERVIVUM *Lin. Gen. Pl.* Dodecandria Dodecagynia. *Cal.* 12. partitus *Petala* 12. *Capſulæ* 12. polyſpermæ.
Raii Syn. Gen. 17. Herbæ multisiliquæ seu corniculatæ.
SEMPERVIVUM *tectorum* foliis ciliatis propaginibus patentibus. *Linn. Syſt. Vegetab. p.* 178. *Sp. Pl.* 664. *Fl. Suec. n.* 428.
SEMPERVIVUM roſulis glabris ciliatis, petalis conglutinatis, lanceolatis, hirſutis, quatuordenis. *Haller. hiſt. n.* 949.
SEDUM tectorum. *Scopoli Fl. Carn. n.* 529.
SEDUM majus vulgare. *Bauhin. pin.* 283. *Parkinſon.* 730.
SEMPERVIVUM majus. *Ger. emac.* 510. *Raii Syn. p.* 269. Houſeleek.
Hudſon. Flor. Angl. ed. 2. *Lightfoot. Fl. Scot. p.* 251.

RADIX biennis, ramoſa, plurimis fibrillis inſtructa.

FOLIA radicalia in formam Roſæ plenæ diſpoſita, ſeſſilia, cuneiformia, pluſquam pollicaria, carnoſa, craſſa, ſupra plana, ſubtus convexiuſcula, utrinque glabra, inferne albida, margine ciliata, et ſæpius rubore tincta, acuminata, erecta, exteriora majora, interiora ſenſim minora.

PROPAGINES longius petiolatæ, globoſæ, magnitudine ovi columbini vel ultra, ſtrobiliformes, imbricatæ foliis erectis.

PETIOLI propaginum cylindrici, teretes, ferruginei, lanuginoſi, longius exporrecti, nudi, e baſi radicis prope folia, exeuntes.

SCAPUS dodrantalis aut pedalis, erectus, teres, lanuginoſus, rubicundus, folioſus, apice ramoſus, ramis floriferis patentibus, recurvis.

FLORES plurimi, conferti, erecti, ſecundi, carnei.

CALYX: Perianthium plerumque duodecemfidum, laciniis lanceolatis, hirſutis, ciliatis, viſcoſis, apice purpureis.

COROLLA: Petala duodecim et ultra, calyce duplo longiora, lanceolata, carnea.

STAMINA: Filamenta numero et figura maxime variantia, plerumque duodecim, ſubulato-tenuia; Antheræ ſubrotundæ, purpureæ.

PISTILLUM: Germina duodecim in orbem poſita, erecta, deſinentia in Stylos totidem patentes; Stigmata acuta.

PERICARPIUM: Capsulæ oblongæ, compreſſæ, extrorſum acuminatæ, introrſum dehiſcentes.

SEMINA plurima, ſubrotunda, parva.

ROOT biennial, branched, and furniſhed with numerous fibres.

LEAVES next the root diſpoſed in the form of a full blown double roſe, ſeſſile, wedge-ſhaped, ſomewhat more than an inch long, fleſhy, thick, above flat, on the under ſide a little convex, ſmooth on both ſides, beneath whitiſh, the edges fringed with hairs, and generally tinged of a reddiſh colour, pointed, upright, the outer ones largeſt, the inner ones gradually ſmalleſt.

OFFSETTS ſtanding on long footſtalks, globular, the ſize of a pidgeon's egg or larger, formed ſomewhat like the cone of a pine, the leaves laying one over another and upright.

FOOTSTALKS of the offſets cylindrical, round, iron-colour'd, ſlightly wooly, ſtretching out to a conſiderable length, naked, ſpringing from the baſe of the root near the leaves.

FLOWERING-STEM from nine inches to a foot in height, upright, round, wooly, of a reddiſh colour, leafy, at top branched, the branches ſuſtaining the flowers, ſpreading, and bending back.

FLOWERS numerous, crouded, upright, growing all one way, of a fleſh colour.

CALYX: a Perianthium divided uſually into twelve ſegments, which are lanceolate, hirſute, edged with hairs, clammy, and purpliſh at top.

COROLLA: twelve or more Petals twice the length of the calyx, lanceolate and fleſh coloured.

STAMINA: Filaments varying very much both in ſhape and number, generally fourteen, ſlender and tapering; Antheræ roundiſh and purple.

PISTILLUM: twelve Germina placed in a circle, upright, terminating in the ſame number of ſpreading Styles; Stigmata pointed.

SEED-VESSEL: numerous oblong Capsules, flatten'd, outwardly terminating in a point, and opening inwardly.

SEEDS numerous, roundiſh and ſmall.

Mr. Ray, in his *Synopſis*, and Mr. Lightfoot, in his *Flora Scotica* doubt whether the Houſeleek be originally a native of this country, however that be, it is now ſo common a plant on the houſe, or wall of every one that is in the leaſt fond of plants, that we ſhall not apologize for introducing it among our London plants.

Haller deſcribes it among his *Swiſſerland* plants, and having gathered it on the Alps in its truly wild ſtate, he enters very minutely into its deſcription, and among other peculiarities he takes notice of the uncommon appearance which the Filaments often aſſume, and which is indeed ſuch an appearance as would much puzzle an inexperienced Botaniſt, the Filaments as he truly obſerves are of two kinds, the one perfect and ſimilar to the generality of Filaments, the other even when young are evidently enlarged towards the end, and throw out from their ſubſtance little oblong white corpuſcles like the eggs of ſome inſect, which indeed I firſt took them to be, not having then looked into Haller, but on examining a great number of flowers at different ſtages of their growth I found they were common to many filaments, and that thoſe filaments which were thus enlarged were alſo more glutinous than the others, the Antheræ on their extremities were ſomewhat imperfect, as the fructification proceeded towards maturity, the filaments continued to enlarge about the middle, while the top was drawn out to a kind of beak, indeed in this ſtate they ſeem to partake more of the nature of the Piſtillum than of the Filaments, and for ſuch would be liable to be taken, on cutting them through they appeared hollow and contained ſome of the ſame corpuſcles which were obſervable on the outſides of many of them, ſo that from their preſent appearance it was impoſſible to know that they were originally filaments, which may ſerve as a caution to ſtudents that in examining of flowers they ſhould always begin with ſuch as are not expanded. *Vid.* 1. 2. 3. 4. 5. 6. 7. 8.

Houſeleek has been univerſally conſidered as a cooler, the leaves bruiſed, or its juice have been applied to burns, ſpreading ulcerations, fiſſures of the tongue, the piles, inflammations of the eye, &c. the juice mixt with a little alum and honey is recommended for the thruſh in children, and the leaves themſelves are frequently applied to corns.

Linnæus informs us that this plant is a preſervative to the coverings of the houſes in Smoland, it certainly may with the leaſt poſſible trouble be made quickly to cover the whole roof of a houſe, whether that roof conſiſts of tiles, thatch, or wood, by ſticking the offſetts on with a little earth or Cow Dung; and if it ſhould not be found to have the good effect here ſpoken of, which I am by no means inclined to doubt, it forms at leaſt a very pretty ornament on Barns, Stables, Out-Houſes and Walls, particularly in the month of July when it flowers.

MYOSOTIS SCORPIOIDES. MOUSE-EAR SCORPION-GRASS.

MYOSOTIS *Lin. Gen. Pl.* PENTANDRIA MONOGYNIA.
Cal. hypocrateriformis, 5. fida, emarginata : faux clauſa fornicibus.

Raii Syn. Gen. 13. HERBÆ ASPERIFOLIÆ.

MYOSOTIS *Scorpioides* ſeminibus lævibus, foliorum apicibus calloſis. *Lin. Syſt. Vegetab. Sp. Pl.* p. 188.
Fl. Suecic. n. 157.

SCORPIURUS radice longa fibrata perenni. *Hall. hiſt.* 591.

MYOSOTIS *Scorpioides. Scopoli.* n. 185.

ECHIUM ſcorpioides paluſtre *Bauhin. pin.* 254.

MYOSOTIS ſcorpioides paluſtris. *Ger. emac,* 337.

MYOSOTIS ſcorpioides repens. *Park.* 691. *Raii Syn.* p. 222. n. 4. Water Scorpion-Graſs.
Hudſon. Fl. Angl. ed 2. p. 78.

Lightfoot. Fl. Scot. p. 232.

RADIX per aquam longe excurrit, et fibrillas e geniculis dimittit.	ROOT runs out to a great length through the water, and ſend down fibres from the joints.
CAULIS baſi repens, dein erectus, pedalis aut bipedalis, teres, ſolidus, ramoſus, glaber, ſæpe hirſutus.	STALK creeping at bottom, afterwards upright, from one to two feet high, round, ſolid, branched, ſmooth, but often hairy.
FOLIA alterna, lanceolata, ſeſſilia, ſubdecurrentia, glabra ſive hirſuta, margine ſæpe revoluta.	LEAVES alternate, lanceolate, ſeſſile, ſlightly decurrent, ſmooth or hirſute, the edge often roll'd back.
RACEMI longi, dichotomi, divaricati, apicibus involutis.	RACEMI long, dichotomous ; divaricating, the tops roll'd in.
FLORES pedunculati, ſecundi ; pedunculis alternis, erectis.	FLOWERS ſtanding on footſtalks and growing all one way ; footſtalks alternate and upright.
CALYX : PERIANTHIUM monophyllum, tubulatum, quinquedentatum, perſiſtens. *fig.* 1.	CALYX : a PERIANTHIUM of one leaf, tubular, having five teeth and permanent. *fig.* 1.
COROLLA monopetala, hypocrateriformis, *Tubus* longitudine calycis ; *Limbus* planus, ſemiquinquefidus, *laciniis* obtuſis, ſubemarginatis ; *Faux* clauſa ſquamulis quinque convexis, prominentibus, luteis. *fig.* 2. 3. 6.	COROLLA monopetalous, ſalverſhaped, the *Tube* the length of the calyx : the *Limb* flat, divided into five blunt ſegments with a ſlight notch in each ; the mouth cloſed with five convex prominent yellow ſcales or glands. *fig.* 2. 3. 6.
STAMINA : FILAMENTA quinque in collo tubi, breviſſima : ANTHERÆ oblongæ, flavæ, apicibus tumidis, tectæ. *fig.* 4.	STAMINA : five Filaments, very ſhort, placed in the neck of the tube ; ANTHERÆ oblong, yellow, the tips ſwelled, and encloſed. *fig.* 4.
PISTILLUM : GERMINA quatuor ; STYLUS filiformis, longitudine tubi corollæ ; STIGMA obtuſum.	PISTILLUM : GERMINA four; STYLE thread ſhaped, the length of the tube of the corolla ; *Stigma* blunt.
PERICARPIUM nullum, *Calyx* ſemina in ſinu fovens.	SEEDVESSEL wanting, the *Calyx* containing and encloſing the ſeeds.
SEMINA quatuor, ovata, glabra, nigri cantia, nitida. *fig.* 5.	SEEDS four, oval, ſmooth, blackiſh, and ſhining. *fig.* 5.

FEW plants aſſume ſo great a variety of appearances as the *Myoſotis ſcorpioides*, few accomodate themſelves to ſuch a diverſity of ſoil, and ſituation ; the very different habit which this plant aſſumes in dry, and wet ſituations, has induced HALLER to divide it into two ſpecies, viz. annual and perennial, the aquatic one having according to him a perennial, and the other an annual root ; we might perhaps be nearly as much juſtified in conſidering ſome others of its ſtriking varieties as ſpecies alſo, particularly the one with yellow flowers and the larger flowered one figured by RAY, but as LINNÆUS and the generality of modern Botaniſts agree in conſidering them all but as one ſpecies, we rather chuſe to acquieſce in their determination ; ſhould future obſervation or experiment give us any reaſon to ſuppoſe them ſpecies, we ſhall be very happy to do juſtice to the opinion of Baron HALLER.

The aquatic variety here figured grows very commonly in wet ditches and rivulets, its flowers eſpecially in ſhady ſituations being much larger and more conſpicuous than when growing in a dry ſoil are often remarked for their beauty and delicacy, they ſomewhat reſemble blue enamel, and are a very pretty ornament for the edges of ponds.

On dry ground it uſually occurs in fallow fields, and gardens but little cultivated ; the variety with yellow flowers is not unfrequent on dry ſandy banks, and ſometimes on walls ; they all flower from May to Auguſt and September.

LINNÆUS ſuſpects its being poiſonous to ſheep. vid. *Stillingfleets miſcel. tracts. p.* 355. *ed.* 2.

Myosotis scorpioides

Sansom Sculp.

Rumex maritimus

RUMEX MARITIMUS. SMALL WATER DOCK.

RUMEX *Lin. Gen. Pl.* HEXANDRIA TRIGYNIA.
Cal. 3. phyllus. *Petala* 3. conniventia. *Sem.* 1. triquetrum.
Raii Syn. Gen. 5. HERBÆ FLORE IMPERFECTO SEU STAMINEO VEL APETALO POTIUS.

RUMEX *maritimus* floribus hermaphroditis: valvulis dentatis graniferis, foliis linearibus. *Lin. Syſt. Vegetab.* p. 285. *Sp. Pl.* 478. *Fl. Suecic.* n. 313.

LAPATHUM petiolis lateſcentibus, foliis longe lanceolatis, floribus verticillatis verrucoſis. *Haller hiſt.* n. 1590.

LAPATHUM aquaticum, anguſtiſſime acuminato folio. *Bocc. mus.* 2. p. 142. t. 115.

LAPATHUM aureum glomerulis denſis. *Pet. Herb. T.* 2. *fig.* 8.

ANTHOXANTHON. *J B.* II 988. anguſtifolium polyſpermon. *Merret pin.*

LAPATHUM aureum *Pet. herb. t.* 2. *f.* 7. longo anguſtoque folio, Anthoxantho plurimo accedens, verticillis rarioribus caulem cingentibus, ſemine majori. *Raii Syn. p.* 142. Golden Dock.
Hudſon. Fl. Angl. ed. 2. p. 155.
Lightfoot Fl. Scot. p. 118.

RADIX perennis, fuſiformis, foris ex rubro fuſca, intus ruberrima, ſapore adſtringente, et ingrato.	ROOT perennial and tapering, externally of a reddiſh brown, internally of a bright red colour, its taſte aſtringent and unpleaſant.
CAULIS bi aut tripedalis, ramoſus, rubicundus, ſulcatus, ſcabriuſculus.	STALK from two to three feet high, branched, of a reddiſh colour, grooved, and ſlightly rough.
FOLIA *radicalia* longe petiolata, dodrantalia aut pedalia, oblongo lanceolata, baſi paulum anguſtata, e viridi cæruleſcentia, planiuſcula, margine undulato-crenata, *ſuperiora* lineari-lanceolata, ſuperne fere avenia, plerumque ſurſum curvata.	LEAVES *next the root* ſtanding on long fooſtalks, oblong and lanceolate, a little narrowed at the baſe, of a blueiſh green colour, flattiſh, but ſlightly waved and notched on the edge, the *top leaves* of a ſhape betwixt linear and lanceolate, having on the upper ſide ſcarce any appearance of veins, and uſually bent upwards.
FLORES ſæpius flaveſcentes, circa caulem in denſis et numeroſis glomerulis verticillatim diſpoſiti.	FLOWERS moſtly of a yellowiſh colour, placed around the ſtalk in numerous thick whirls.
CALYX: PERIANTHIUM triphyllum, foliolis lanceolatis, erectis, concavis, paulum incurvis.	CALYX: a PERIATHIUM of three leaves, which are lanceolate, upright, hollow, and bent a little inwards.
COROLLA: PETALA tria, ovato-lanceolata, viridia, margine prope baſin duobus aut tribus dentibus ſetaceis inſtructa, granifera, granulis, adultis ſuper valvulis, oblongis, tumidis, majuſculis. *fig.* 1. 2.	COROLLA: three PETALS; oval and pointed, of a green colour, the edge near the bottom furniſhed with two or three fine, long teeth, the valves when full grown producing grains which are oblong, tumid and rather large. *fig.* 1. 2.
STAMINA: FILAMENTA ſex, capillaria, breviſſima; ANTHERÆ oblongæ, erectæ, didymæ, flavæ.	STAMINA: ſix Filaments very fine and very ſhort; ANTHERÆ oblong, upright, double and yellow.
PISTILLUM: GERMEN trigonum; STYLI tres, capillares, inter rimas petalorum conniventium exſerti; STIGMATA laciniata.	PISTILLUM: GERMEN three corner'd; STYLES three, very ſlender, projecting from betwixt the junctures of the cloſed petals, STIGMATA jagged.
PERICARPIUM nullum.	SEED-VESSEL none.
SEMEN unicum, triquetrum, nitidum, corollâ incluſum. *fig.* 3.	SEED ſingle, three corner'd, ſhining, contain'd within the cloſed corolla. *fig.* 3.

OF all the different ſpecies of Docks which this country produces, this ſeems to have been the leaſt underſtood; yet are its characteriſtic marks not leſs ſtriking, nor its varieties more remarkable than any of the other ſpecies.

That our plant is the *Rumex maritimus* of *Linnæus* no one can doubt that reads his deſcription in the *Flora Suecica*; the character of the *radix rubra* ſo peculiar to it which is given in the *Syſtema Vegetabilium*, is an additional confirmation of it.

The three ſpecies of *Lapathum* viz. n. 4. 5. 10 added to thoſe of RAY by DILLENIUS in the third edition of the Synopſis and mark'd with an aſteriſk are doubtleſs to be referred to this plant and conſidered only as ſome of its varieties.

The name of *maritimus* ſeems but ill applied, as it is by no means confined in its growth to the Sea ſhore, the term *paluſtris* which Mr. HUDSON has given to a ſpecies which I profeſs my ſelf totally ignorant of would perhaps be more ſuitable for it.

The plant here figured grows in the greateſt plenty in the neighbourhood of my Garden St. Georges Fields, ſo that I have had frequent opportunities of obſerving it in all its ſtates, its moſt ſtriking character when in flower or ſeed is the number and narrowneſs of the leaves on its branches; when view'd more cloſely, we are ſtruck with the number and length of the teeth on the edges of the ſeed valves, which valves are frequently though not always of a yellowiſh colour and furniſhed with remarkably large and long grains, if any doubt remains reſpecting the ſpecies, the root on being cut acroſs exhibits a beautifull red colour equal to any carmine, and which is a character that I have hitherto always found to be conſtant to this ſpecies.

The natural ſituation of the Rumex maritimus is a moiſt one; thus we find it on the edges of wet ditches, and rivulets, tho' not unfrequently in paſtures or drier ground, on the former particularly if the ſituation be ſheltered and the ſoil luxuriant it will grow to the height of three or four feet, having radical leaves a foot long and three inches broad which when young aſſume a ſomewhat glaucous appearance, in the latter it ſeldom grows more than a foot high and then its radical leaves are about ſix inches long and one inch or ſomewhat more broad, (outlines of both theſe leaves are repreſented on the plate) but in neither of theſe ſituations does it loſe its character above ſpecified.

It is not only in the neighbourhood of St. Georges Fields that I have noticed this ſpecies but in ſimilar ſituations in many places around London, and I doubt not but it is a very common plant in many parts of England.

It flowers in July, Auguſt and September; I remember once to have ſeen the leaves having red veins like thoſe of the *Rumex ſanguineus.*

It is one of thoſe Docks which are the leaſt noxious to the Farmer; the roots I have been informed are frequently dug up and ſold for thoſe of the ſharp pointed Dock.

INULA DYSENTERICA. COMMON FLEABANE.

INULA *Lin. Gen. Pl.* SYNGENESIA POLYG. SUPERFL.
Recept. nudum. *Pappus* ſimplex. *Antheræ* baſi in duas ſetas deſinentes.
Raii. Syn. Gen. 7. HERBÆ FLORE COMPOSITO, SEMINE PAPPOSO NON LACTESCENTES, FLORE DISCOIDE.

INULA *dyſenterica* foliis amplexicaulibus cordato-oblongis, caule villoſo paniculato, ſquamis calycinis ſetaceis. *Lin. Syſt. Vegetab.* p. 637. *Lin. Spec. pl.* p. 1237. *Fl, Suecic.* n. 557.

ASTER foliis amplexicaulibus, undulatis, ſubtus tomentoſis. *Haller. hiſt. n.* 79.

ASTER *Dyſentericus. Scopoli. Fl. Carn.* n. 1079.

CONYZA media aſteris flore luteo vel tertia dioſcoridis. *Bauh, pin.* 265.

CONYZA media Matthioli, flore magno luteo, humidis locis proveniens. *J. B.* II. 1050.

CONYZA media *Ger. emac.* 482. HERBA DYSENTERICA. *Cat. Altdorf. Raii. Syn.* p 174. Middle Fleabane.
Hudſon. Fl. Angl. p. 368.
Oeder. Fl. Dan. t. 410.

RADIX perennis, repens, albida, craſſitie pennæ anſerinæ, majuſculis fibris donata.

CAULIS pedalis ad bipedalem, erectus, ramoſiſſimus, teres, firmus, ſolidus, lanuginoſus.

FOLIA alterna, conferta, patentia, amplexicaulia, oblonga, obſcure ſerrata, inferne tomentoſa, ſuperne ſubhirſuta, obſcure viridia.

RAMI plurimi, cauli ſimiles, erecti, ſerioribus altius provectis.

FLORES flavi, procul conſpicui, numeroſi, ſubcorymboſi.

CALYX: communis, imbricatus, foliolis laxis, ſublinearibus, hirſutis.

COROLLA compoſita, radiata, *Corollulæ* hermaphroditæ, æquales, numeroſiſſimæ in diſco. *Femineæ* ligulatæ, numeroſæ, confertæ in radio. *Propria* Hermaphroditis infundibuliformis, limbo quinquefido, erectiuſculo, *fig.* 7. *Feminea* ligulata, ſublinearis, tridentata. *fig.* 1.

STAMINA Hermaphroditis: FILAMENTA quinque, filiformia, brevia. ANTHERA cylindrica, compoſita ex minoribus quinque linearibus, coalitis: ſingulis inferne deſinentibus in ſetas duas rectas longitudine filamentorum.

PISTILLUM Hermaphroditis: GERMEN oblongum, hiſpidulum; STYLUS filiformis, longitudine ſtaminum; STIGMA bifidum, reflexum *fig.* 8. Femineis: GERMEN ut in Hermaphrodito; *fig.* 3. STYLUS longitudine tubi, STIGMA bifidum. *fig.* 2.

PAPPUS piloſus. *fig.* 4. 5. 6.

ROOT perennial, creeping. whitiſh, the thickneſs of a gooſe quill, furniſhed with largiſh fibres.

STALK from one to two feet high, upright, very much branched, round, firm, ſolid, with a wooly ſurface.

LEAVES alternate, ſet thickly together, ſpreading, embracing the ſtalk, oblong, obſcurely ſerrated, underneath woolly, above ſomewhat hirſute, of a dull green colour.

BRANCHES numerous, like the ſtalk, upright, the lateſt growing to the greateſt height.

FLOWERS yellow, conſpicuous at a diſtance, numerous, and forming a kind of corymbus.

CALYX: common to many florets, the leaves placed one over another, ſomewhat linear and hirſute.

COROLLA compound and radiate, hermaphrodite *Florets* equal and exceedingly numerous in the center. *Female* ligulate, numerous, growing cloſe together, in the circumference. *Each* Hermaphrodite floret funnel ſhaped, the limb divided into five ſegments which are nearly upright, *fig.* 7. *Female* ligulate, ſomewhat linear, terminating in three teeth. *fig.* 1.

STAMINA in the Hermaphrodite flower; five FILAMENTS thread-ſhaped and ſhort. ANTHERÆ forming a cylindrical tube, compoſed of five ſmaller linear ones united, each terminating below in two ſtrait ſetæ or threads the length of the filaments.

PISTILLUM of the Hermaphrodite florets: GERMEN oblong and ſomewhat hiſpid; STYLE thread-ſhaped, the length of the ſtamina; STIGMA bifid and turning back. *fig.* 8. of the female Florets; GERMEN as in the Hermaphrodite ones. *fig.* 3. STYLE the length of the tube; STIGMA bifid.

DOWN hairy. *fig.* 4, 5, 6.

AT the cloſe of the year this plant contributes not a little to enliven and beautify the ſides of our moiſt ditches, to the Farmer it however affords no very pleaſing ſpectacle when it overruns as it frequently does large tracts of Land and gives it a barren uncultivated appearance.

LINNÆUS in his *Flora Suecica* mentions his having been informed by General *Keit* that the Ruſſians in their expedition againſt the Perſians were cured of the Bloody Flux by means of this plant, whence it has probably obtained its name of *dyſenterica*, had it poſſeſſed any efficacy in this diſeaſe ſuperior to the medicines in general uſe it would moſt probably have been retain'd in the preſent practice. RAY has obſerved that the leaves when bruiſed ſmelt like Soap, RUTTY informs us that the juice is ſaltiſh and warms the mouth a little, that the decoction is ſomewhat acrid in the throat, at the ſame time aſtringent and turning green with vitrol of Iron, that the infuſion is ſomewhat aſtringent, very bitter in the throat, and turning black with vitriol of Iron.

Cattle in general diſlike it.

Inula dysenterica

Sanson Sculp

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Bryum cespititium

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Kilburn

Bryum argenteum

BRYUM ARGENTEUM. SILVER BRYUM.

BRYUM *Lin. Gen. Pl.* CRYPTOGAMIA MUSCI.
Anthera operculata. *Calyptra* lævis. *Filamentum* e tuberculo terminali ortum.
Raii. Syn. Gen. 3. MUSCI.
BRYUM *argenteum* antheris pendulis, ſurculis cylindricis imbricatis lævibus. *Lin. Syſt. Vegetab.* p. 789. *Sp. Pl.* 1586. *Fl. Suecic. n.* 1008.
BRYUM caulibus teretibus, capſulis ovatis acuminatis pendulis. *Haller. hiſt.* 1821.
BRYUM argenteum. *Scopoli. Fl. Carn.* n. 1310.
BRYUM pendulum julaceum argenteum et ſericeum. *Dill. muſc.* 392. t. 50. f. 62.
MUSCUS ſquamoſus argenteus, ericæ folio. Vaillant. paris. 134. t. 26. f. 3.
MUSCUS minimus e viridi argenteus, capitulis oblongis cernuis. *Mori. hiſt.* 3. p. 627. f. 15. t. 6. f. 17.

Confertim nacitur, cauliculis ſeſſilibus, in ramulorum aliquot ſurculos teretes, (duarum trium linearum) diviſis.

FOLIA ovata-lanceolata, acuta, pilo terminata, quadruplici alterna ſerie diſpoſita, tam arcte cauli appreſſa ſunt, ut nonniſi per lentem diſtingui poſſint, pilis creberrimis, ſericeis, argenteis.

PEDUNCULI circa hiemem ſurgunt e baſi cauliculorum, ab aliquot lineis ad ſemunciam longæ, inferne purpureæ, ſuperne pallidiores.

CAPSULÆ ovatæ, nutantes, luteæ, verſus ſetam rubicundæ, quæ ab initio virides, et rectæ ante maturitatem fuere. *Operculum* breve, obtuſum, aurantiacum. *Ora* ciliata, *Calyptra* e viridi fuſca, quæ nonniſi in junioribus capſulis reperitur.

Stalks growing cloſe together and ſeſſile, dividing into round ſurculi two or three lines in length.

LEAVES oval pointed, terminated by a hair, diſpoſed in an alternate quadruple row, ſo cloſely preſſed to the ſtalk, as to be ſcarce viſible without a magnifier, the hairs exceedingly numerous, ſilky, of a ſilver colour.

PEDUNCLES ariſe from the bottom of the ſtalks, about winter, from a few lines to half an inch in length, below purpliſh, above paler.

CAPSULES oval, pendulous, yellowiſh, but near the peduncle reddiſh, when young green, and upright. *Operculum* ſhort, obtuſe and of an orange colour. *Mouth* ciliated, *Calyptra* of a greeniſh brown, and only viſible in the young capſules.

It is not poſſible in painting to do juſtice to thc ſilvery appearance which this little moſs uſually puts on, and which in general obviouſly diſtinguiſhes it from all our other Bryums, this ſilvery hue it however loſes in ſome ſituations and appears of a green colour, eſpecially in moiſt ſhelter'd places, where the leaves not only become greener but laxer alſo and the ſurculi grow to a much greater length, in this ſtate it is figured by DILLENIUS as a diſtinct ſpecies, the ſurculi vary much likewiſe in their ſhape ſometimes becoming very fine and almoſt thread ſhaped as repreſented at *fig.* 2. 3.

The Bryum argenteum produces its Capſules as early as December and January, and this their early appearance is one reaſon why they are not not ſo often found as ſome others, but added to this it does not produce fructifications ſo plentifully as ſome other Bryums, large patches of it being often found perfectly barren.

It is very common on Walls and Banks.

Fig 1. to 7. repreſent it of its natural ſize in its various ſtates, fig 8. to 12 magnified.

BRYUM CÆSPITICIUM. MATTED BRYUM.

BRYUM *cæſpiticium* antheris pendulis, foliis lanceolatis acuminato-ſetaceis, pedunculis longiſſimis. *Lin. Syſt. Vegetab. p.* 799. *Sp. Pl.* p. 1586. *Fl. Suecic.* 1010.
HYPNUM foliis ovato-lanceolatis ariſtatis patulis, capſulis ovatis obtuſis pendulis. *Haller. hiſt.* 1790.
BRYUM pendulum ovatum cæſpiticium et piloſum, ſeta bicolori. *Dill. Muſc.* 396. *tab.* 50. f. 66.
MUSCUS capillaceus minimus, capitulo nutante, pediculo purpureo. *Vaill. paris.* 134. t. 29. f. 7.
MUSCUS trichoides capitulo parvo reflexo, pediculo ima medietate rubro, ſumma luteo-viridi. *Moris. H. Ox.* III. p. 629. ſ. xv. t. 6. f. xv. *Raii. Syn.* p. 100. n. 44.

CAULICULIS in denſos cæſpites congeſtis, lata ſtrata efficit, ſupra muros imprimis et in terra glareoſa. *fig.* 3.

SURCULI ipſi breves, et ad aliquot tantum lineas ſuper terram eminentes, *fig.* 1. 4. ſubramoſi, inferius multo tomento fuſco obſiti.

FOLIA exigua, denſe congeſta, ovato lanceolata, pilo incano terminata, pallide e luteo viridia, ſericea, ſplendentia, ſub lente in humida planta pellucida. *fig.* 14. 16.

PEDUNCULI unciales, *fig.* 5. inferne purpureæ, ſuperne luteæ, e ſurculorum annotinorum roſula terminali prodeunt, *fig.* 1. inter ramulos, ſive potius ſurculos juniores, bulbillo inſtructi, *fig.* 2.

CAPSULA ex ovato-cylindrica, ab initio erecta *fig.* 7. tenuior, deinde ſenſim craſſeſcens, pendula, *fig.* 8. 9, 11. ſublutea, operculo tecta papilliformi, miniato, nitido, quo ſecedente ora apparet ciliata. *fig.* 12.

CALYPTRA in junioribus erecta, gracilis, conica, pallide fuſca, in adultioribus rufa, inclinata. *fig.* 7. 8 9.

STALKS growing cloſely together, form broad turfs particularly on walls and gravelly ſituations. *fig.* 3.

SURCULI themſelves ſhort, raiſed a few lines only above the earth, ſomewhat branched, *fig.* 1. 4. below cover'd with a brown wooly kind of ſubſtance.

LEAVES ſmall, cloſely compacted, oval pointed, terminated by a grey hair, of a pale yellowiſh green colour, ſilky, ſhining; under a magnifier, in the moiſt plant tranſparent. *fig.* 14. 16.

PEDUNCLES about an inch in length, *fig.* 5. below purple, above yellow, proceeding from the top of the laſt years ſurculus *fig.* 1. between the branches or rather younger ſurculi, furniſhed with a ſmall bulb. *fig.* 2.

CAPSULE of an oval cylindrical form, at firſt upright. *fig.* 7. ſlender, afterwards becoming gradually thicker and pendulous, *fig.* 8, 9, 11. of a yellowiſh colour, cover'd with a ſmall, ſhort, prominent red and ſhining operculum, which falling off the mouth appears ciliated. *fig.* 12.

CALYPTRA on the young capſules upright, ſlender, conical, and of a pale brown colour, in thoſe more advanced reddiſh brown, and inclined to one ſide. *fig.* 7, 8, 9.

THIS ſpecies of Bryum is very commonly met with on Walls alſo on gravelly and ſandy ſoils producing its Capſules in February, March and April, it varies much in ſize, in the ſhape of its leaves and the length of its Surculi.

HYPERICUM HUMIFUSUM. TRAILING ST. JOHN's WORT.

HYPERICUM *Linnæi. Gen. Pl.* Polyadelphia Polyandria.
Cal. 5. partitus. *Petala* 5, *Filamenta* multa, in 5. phalanges baſi connata. *Capſula.*
Raii. Syn. Gen. 24 Herbæ pentapetalæ vasculiferæ.

HYPERICUM humifuſum floribus trigynis axillaribus, ſolitariis, caulibus ancipitibus proſtratis filiformibus, foliis glabris. *Lin. Syſt. Vegetab.* p. 332. *Sp. Pl.* 1105. *Fl. Suecic.* 681.

HYPERICUM caule proſtrato, foliis ovatis, calycibus ſerratis punctatis. *Haller. hiſt. p.* 5. *n.* 1039.

HYPERICUM minus ſupinum vel ſupinum glabrum. *C. Bauh. pin.* 279.

HYPERICUM minus ſupinum. *Park.* 572.

HYPERICUM ſupinum glabrum. *Ger. emac.* 541. *Raii. Syn. p.* 342. the leaſt trailing St. Johns Wort.
Hudſon. Fl Angl. ed. 2. *p.* 332.
Lightfoot. Fl. Scot. p. 418.

RADIX perennis, luteſcens, fibroſa.

CAULES plures ex eadem radice, ſpithamæi, procumbentes, teretes, vix manifeſte ancipites, læves, rubentes, ſummitate ramoſi.

FOLIA oppoſita, oblongo ovata, obtuſa, glabra, integerrima, margine punctis nigris notata.

CALYX: Perianthium quinquepartitum, laciniis magnis, inæqualibus, ovato oblongis, margine reflexis et glandulis ſerrato punctatis, mucrone rufo terminatis. *fig.* 1.

COROLLA: Petala quinque, oblonga, flava, obtuſa, calyce paulo longiora, margine glandulis punctata. *fig.* 2.

STAMINA: Filamenta raro ultra viginti, in tres phalanges diſtincte diviſa; Antheræ minimæ, flavæ. *fig.* 3.

PISTILLUM: Germen ſubrotundum, Styli tres, ſimplices, diſtantes, longitudine ſtaminum; Stigmata ſimplicia. *fig.* 4.

PERICARPIUM: Capsula oblongo ovata, membranacea, trilocularis, immatura ruberrima.

SEMINA plurima, minima.

ROOT perennial, of a yellowiſh colour and fibrous.

STALKS ſeveral from the ſame root, about half a foot in length, procumbent, round, ſcarce perceptibly two edged, ſmooth, of a reddiſh colour and branched at top.

LEAVES oppoſite, oblong, oval, obtuſe, ſmooth, entire, dotted on the edge with black.

CALYX a Perianthium divided into five ſegments, which are large, unequal, oval, oblong, the edge turned back and ſawed as it were with black glands, terminating in a red point. *f.* 1.

COROLLA: five oblong yellow Petals, blunt at the end, a little longer than the calyx, and dotted on the edge with glands. *fig.* 2.

STAMINA: Filaments ſeldom more than twenty, diſtinctly divided into three bodies; Antheræ very ſmall and yellow. *fig.* 3.

PISTILLUM: Germen roundiſh; Styles three, ſimple, ſpreading, the length of the ſtamina; Stigmata ſimple. *fig.* 4.

SEED-VESSEL an oblong oval Capſule, membranous, of three cavities, of a very bright red colour before it is ripe.

SEEDS numerous and very minute.

This is the leaſt of all our *Hypericums*, but ſcarcely inferior to any of them in beauty and delicacy.

It grows frequent enough, in gravelly paſtures, in fields that have long lain fallow, and likewiſe on heaths, eſpecially where the ſoil is moiſt and clayey.

It flowers in June, July, and Auguſt.

Scopoli without any good grounds, ſuſpects it to be a monſtrous vareity of the *Hypericum perforatum*, from which it differs almoſt as much as it is poſſible for one ſpecies to differ from another.

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Sansom sculp

Hypericum humifusum

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Hydrocharis Morsus ranæ

Sansom Sculp.

HYDROCHARIS MORSUS RANÆ. FROG-BIT.

HYDROCHARIS *Linnæi. Gen. Pl.* DIOECIA ENNEANDRIA.
MASC. *Spatha* 2 phylla. *Cal.* 3 fidus. *Cor.* 3 petala. *Filam.* 3 interiora ſtylifera. FÆM. *Cal.* 3 fidus. *Cor.* 3 petala. *Styli* 6. *Caps.* 6 locularis, polyſperma infera.

HYDROCHARIS. *Linnæi. Syſt. Vegetab.* p. 746. *Spec. Pl.* 1466. *Fl. Suecic.* n. 914.

HYDROCHARIS. *Haller. hiſt.* 4. 1068.

NYMPHÆA alba minima. *Bauh. p.* 193.

MORSUS RANÆ *Parkinſon.* 1252.

MORSUS RANÆ *Gerard. emac.* 818.

STRATIOTES folio aſari, ſemine rotundo *Raii. Syn.* p. 290. The leaſt white Water Lilly or Frog-bit.
Hudſon. Fl. Angl. ed 2. p. 436.
Lightfoot. Fl. Scot. p. 622.

RADIX: Flagellis in longum extenſis facile multiplicatur hæc planta, nutrimentum hauriens per radiculas albas, fibrilloſas, in limum profunde deſcendentes.

FOLIA ſex, ſive octo, natantia, rotundato-reniformia, carnoſa, glabra, integerrima, ſubpellucida, venis paucis circularibus, plurimis tranſverſis notata, ſubtus rubella.

PETIOLI ſpithamæi, craſſi, pellucidi, lineis plurimis decuſſati.

SPATHÆ in utraque ſexu plurimæ, radicales, ovatæ, pellucidæ, in maſculis etiam circa medium pedunculi enaſcuntur binæ, floſculos tenellos, inapertos quaſi in veſicâ continentes.

PEDUNCULI longitudine petiolorum, erecti; maſculi triflori aut quadriflori; feminei uniflori, craſſiores.

Mas.

CALYX: PERIANTHIUM triphyllum, foliolis ovatis, concavis, flaveſcentibus, membranaceis, patentibus. *fig.* 1.

COROLLA: PETALA tria, alba, plana, rugoſula, tenerrima, baſi flava.

STAMINA: FILAMENTA novem, in tres ordines diſpoſita, quorum intermedius ordo ſtipitem ſubulatum e baſi ſua interiore, ſtyli ad inſtar exſerit, et in centro collocat. Duo reliqui ordines baſi connectuntur, ut internum et externum cohæreat filamentum; ANTHERÆ ſublineares, biloculares, flavæ. *fig.* 2.3.4.5.6.7.

PISTILLUM: GERMINIS rudimentum in centro. *f.* 8.

Femina.

CALYX: PERIANTHIUM ut in mare, ſuperum.

COROLLA ut in mare.

PISTILLUM: GERMEN ſubovatum, inferum: STYLI ſex, longitudine calycis, patentes, compreſſi, bifido-canaliculati; STIGMATA bifida, acuminata. *fig.* 9. 11.

NECTARIUM: *Glandulæ* tres, flavæ, germen coronant. *fig.* 10.

PERICARPIUM: CAPSULA coriacea, ſubrotunda, ſexlocularis.

SEMINA numeroſa, minima, ſubrotunda.

ROOT: this plant eaſily multiplies itſelf by means of runners which ſhoot out to a great length, and is ſupported by long fibrous roots, which penetrate deep into the mud.

LEAVES ſix or eight, ſwimming, of a roundiſh kidney ſhape, fleſhy, ſmooth, perfectly entire, ſomewhat tranſparent, marked with a few circular but numerous tranſverſe lines, reddiſh underneath.

LEAF STALKS ſix or ſeven inches long, thick, tranſparent, having numerous croſs bars.

SHEATHS in both ſexes numerous, next the root, oval, and tranſparent, in the male plant alſo a pair grow out about the middle of the flower ſtalk which contain the tender unopen'd bloſſoms as in a bladder.

FLOWER-STALKS the length of the leaf ſtalks, upright; the male producing three or four flowers, the female one only, thicker in ſize.

Male.

CALYX: a PERIANTHIUM of three leaves, which are oval, concave, yellowiſh, membranous and ſpreading. *fig.* 1.

COROLLA: three, white, flat *Petals* a little crumpled, very tender, and yellow at bottom.

STAMINA: nine FILAMENTS, diſpoſed in three rows, of which each in the middlemoſt puts out from its baſe on the inſide a ſtyle like ſubſtance which is placed in the center of the flower. The two other rows are connected at bottom ſo that the internal and external filament adhere together; ANTHERÆ yellow, nearly linear, with two cavities. *fig.* 2. 3. 4. 5. 6. 7.

PISTILLUM; the rudiment only of a GERMEN in the center. *fig.* 8.

Female.

CALYX: a Perianthium as in the male, placed above the Germen.

COROLLA as in the male.

PISTILLUM: GERMEN ſomewhat oval, beneath the calyx; STYLES ſix, the length of the calyx, ſpreading, flat, forked and channel'd; STIGMATA forked and pointed.

NECTARY: three yellow *Glands* crown the germen.

SEED-VESSEL: a roundiſh, leathery *Capſule*, with ſix cavities.

SEEDS numerous, very minute, and roundiſh.

MOST of the deep ditches with a muddy bottom, having a ſlow current of water, and which abound in the vicinity of the Thames, have their ſurface cover'd with this plant in Autumn, at which period its bloſſoms which are uncommonly delicate make their appearance.

The leaves and indeed the whole ſtructure and oeconomy of the Frog-bit is exceedingly curious, and deſerving the minute attention of the inquiſitive Botaniſt.

Its particular uſes we ſeem at preſent unacquainted with.

RAY mentions a variety of it with ſweet, double flowers, growing in a ditch at the ſide of *Audrey Cauſey* near a wooden bridge in the Iſle of Ely.

VINCA MINOR. SMALL PERIWINKLE.

VINCA *Lin. Gen. Pl.* PENTANDRIA MONOGYNIA.
Raii Syn. Gen. 17 HERBÆ MULTISILIQUÆ SEU CORNICULATÆ.
VINCA *minor* caulibus procumbentibus, foliis lanceolato ovatis, floribus pedunculatis. *Lin. Syſt. Vegetab.* p. 209. *Sp. Pl.* 304.
PERVINCA caulibus procumbentibus, foliis ovato lanceolatis, petiolis unifloris. *Haller. hiſt.* 572.
CLEMATIS daphnoides minor. *B. Pin.* 301.
VINCA PERVINCA minor. *Ger. emac.* 894.
VINCA PERVINCA vulgaris. *Parkins.* 380. *Raii Syn.* p. 268. Periwinkle.
Hudſon Fl. Angl. ed. 2. p. 91. *Lightfoot Fl. Scot.* p. 147.

RADIX perennis, repens, fibroſa.

CAULES floriferi erecti, ſimplices, dodrantales, aut pedales, in ſepibus etiam, vepris ſuſtentati ad altitudinem humanam quandoque evehuntur, debiles, teretes, glabri, utrinque ſulco obſolete notati, peractâ floreſcentiâ humi repent.

FOLIA oppoſita, petiolata, petiolis foliis ipſis quadruplo brevioribus, ſempervirentia, liguſtrina, ovato-lanceolata, glabra, margine integerrima, nuda; in caulibus floriferis lætius virentia.

CAULIS FLORIFERUS unicum aut duos flores, etiam plures aliquando producit, cæruleos, purpureosve, pulchellos, ocello albo, ad plenitudinem pronos.

PEDUNCULI uniflori, axillares, alterni, ſuberecti, foliis duplo fere longiores, teretes, glabri, purpuraſcentes.

CALYX: PERIANTHIUM quinquepartitum, tubo corollæ triplo brevior, perſiſtens, laciniis erectis, acutis, glabris. *fig.* 1.

COROLLA monopetala, hypocrateriformis; *Tubus* inferne cylindraceus, ſuperne latior, lineis quinque inſculptus, rigidulus, externe nitidus, interne villoſus; *Limbus* horizontalis, quinquepartitus, laciniis apici tubi adnatis, extrorſum latioribus, oblique truncatis.

STAMINA: FILAMENTA quinque, breviſſima, inflexa, retroflexa, ſuperne dilatata; ANTHERÆ membranaceæ, obtuſæ, incurvæ, piloſæ, margine utrinque fariniferæ. *fig.* 9. 10.

PISTILLUM: GERMINA duo, ſubrotunda, compreſſa corpuſculis duobus ad latera, nitidis, longitudine germinum; STYLUS obverſe conicus, longitudine ſtaminum; STIGMATA duo, inferius orbiculatum, planum, margine viſcidum, ſuperius capitatum, piloſum, albiſſimum. *fig.* 3. 4. 5. 6. 7. 11.

ROOT perennial, creeping and fibrous.

STALKS producing the flowers, are upright, ſimple, from nine inches to a foot in height, and ſometimes in hedges ſupported by the buſhes, they are raiſed to the height of ſix feet, weak, round, ſmooth, marked on each ſide with a groove faintly impreſſed, when out of bloom creeping on the ground.

LEAVES oppoſite, ſtanding on footſtalks four times ſhorter than the leaves themſelves, evergreen, ſomewhat like thoſe of Privet, oval, and pointed, ſmooth and ſhining, the edge perfectly entire, and naked, thoſe on the flowering ſtalks of the moſt lively colour.

THE FLOWERING STALK produces one or two handſome flowers, ſometimes more, of a blue or purple colour, with a white eye, and much diſpoſed to be double.

FLOWER-STALKS ſupporting one flower, axillary, alternate, nearly upright, almoſt twice the length of the leaves, round, ſmooth and ſhining.

CALYX: a PERIANTHIUM deeply divided into five ſegments, three times ſhorter than the corolla, permanent, the ſegments upright, pointed and ſmooth. *fig.* 1.

COROLLA monopetalous, ſalver-ſhaped; *Tube* below cylindrical, above ſpreading, having five grooves, ſomewhat rigid, externally ſhining, internally villous; *Limb* horizontal, deeply divided into five ſegments, which appear to grow to the top of the tube, externally broadeſt and cut off obliquely.

STAMINA: five FILAMENTS, very ſhort, bent in, and afterwards back again, dilated above; ANTHERÆ membranous, blunt, bent in, hairy, producing its farina on each ſide of the edge.

PISTILLUM: GERMINA two, roundiſh, ſomewhat flattened at the ſides by two ſhining corpuſcles of the length of the germina; STYLE inverſely conical, the length of the ſtamina; STIGMATA two, the lowermoſt orbicular, flat, and clammy on the edge, the uppermoſt forming a little tuft of very white hairs.

WHOEVER looks into the tube of this flower with any degree of attention, muſt be ſtruck with the wiſdom ſhewn in the formation of the parts contained within it; in all the plants I have ſeen I do not recollect any greater inſtance of care taken to preſerve the tender parts of the fructification, each Anthera is terminated by a membrane which bends over at top, and the membranes of all the Antheræ cloſing together, effectually ſeclude every thing which might injure the parts of the fructification below them, diſtinguiſhed not leſs by the delicacy than the ſingularity of their ſtructure. The filaments in their ſhape ſomewhat reſemble a note of interrogation, the Antheræ in their ſtructure are very ſimilar to thoſe of the violet, and open inwardly in the ſame manner: the ſtyle which in moſt flowers is broadeſt at top is here ſlendereſt; they are two in number, but ſo cloſely united, that, without a magnifier, the diviſion is ſcarce to be perceived; the ſtigmata, according to Linnæus, are two in number; it is moſt probable, however, that the lowermoſt, which is flat with a glutinous edge, and which forms a kind of ring round the ſtyles, is the true ſtigma; the top is a little elevated above the ſtigma, and appears like a round white ball, which, when magnified, is found to conſiſt of a number of hairs diverging from one center, in the microſcope it is a very pleaſing ſight; the ripe ſeed veſſel of this plant I have not been able to diſcover; they are moſt probably rarely produced.

This ſpecies of Periwinkle varies much in the colour of its bloſſoms, which are ſometimes purple, ſometimes of a pale blue colour, and ſometimes white; in the gardens it is alſo ſold with divers ſorts of variegated foliage and double bloſſoms.

At the foot of a ſhelter'd hedge expoſed to the morning ſun, it flouriſhes very much, eſpecially if the ſoil be moiſt, and affords a very pretty ornamental flower in the ſpring months, nor is it ſo fugacious as many, but will continue in bloſſom a month or ſix weeks.

It may probably be found wild in divers places about London; as yet, however, I have noticed it in one ſpot only, *viz.* in the hedge of a field on the left hand ſide of Lordſhip Lane near Dulwich, where it had every appearance of being in a wild ſtate.

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Vinca minor

Sansom sculp

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Fragaria sterilis.

Fragaria sterilis. Barren Strawberry.

FRAGARIA *Lin. Gen. Pl.* Icosandria Polygynia.

Cal. 10. fidus. Petala 5. *Receptaculum* ſeminum ovatum, baccatum, deciduum.

Raii Syn. Gen. 25. Herbæ semine nudo polyspermæ.

FRAGARIA *ſterilis* caule decumbente, ramis floriferis laxis. *Lin. Syſt. vegetab.* p. 396. *Sp. Pl.* 709.

FRAGARIA caule proſtrato, foliis ternatis retuſis ſericeis. *Haller. hiſt. helv.* 1113.

FRAGARIA *ſterilis.* Bauh. pin. 327.

FRAGARIA minime veſca. *Park.* 758.

FRAGARIA minime veſca ſeu ſterilis, *Ger. emac.* 998.

FRAGARIA non fragifera, vel non veſca. J. B. 2. 395. *Raii Syn.* ed. 3. p. 254.

Hudſon Fl. Angl. ed. 2. p. 222. *Lightfoot Fl. Scot.* p. 288.

RADIX perennis, nigricans, ſublignoſa.

CAULES plurimi, ſpithamæi, procumbentes, craſſi, ſuffruticoſi, caſtanei, ſtipulis hirſutis tecti.

FOLIA e ſurculis annotinis prodeunt, ternata, obovata, ſerrata, piloſa, ſericea, ſubtus albida, petiolis valde piloſis.

STIPULÆ radicales, plurimæ, ovato acuminatæ, membranaceæ.

PEDUNCULI plurimi, aſcendentes, teretes, piloſi, biflori, bracteâ trifoliata inſtructi.

FLORES albi, parvi.

CALYX: Perianthium monophyllum, planum, ſemidecemfidum, *fig.* 3, ex laciniis, quinque ovato acuminata ſunt inter petala, petalis paulo longiora, quinque lanceolata, petalis paulo breviora, omnibus piloſis. *fig.* 1.

COROLLA: Petala quinque, alba, parva, ſubrotunda, patentia, remota, calyci inſerta.

STAMINA: Filamenta viginta circiter, in orbem poſita, ſubulata, alba, primum inflexa, demum erecta, corolla breviora; Antheræ flavæ, biloculares, *fig.* 4. 5.

PISTILLUM: Germina numeroſa, minima, in capitulum collecta, ſubreniformia; Styli ſimplices, lateri germinis inſerti; Stigmata ſimplicia. *fig.* 7, 8, 9.

RECEPTACULUM *floris* intra germina et filamenta glanduloſum ſeu pulpoſum, villoſum, miniatum; *fructûs* intra germina piloſum. *fig.* 6.

SEMINA plurima, exſucca, in capitulum collecta, e flavo fuſca, appendiculo ſubvilloſo, *fig.* 10. 11.

ROOT perennial, blackiſh and woody.

STALKS numerous, ſix or ſeven inches in length, procumbent, thick, ſomewhat ſhrubby, of a cheſnut colour, and covered with hairy ſtipulæ.

LEAVES grow out of the laſt years ſhoots, three together, inverſely oval, ſawed at the edges, hairy, ſilky, whitiſh underneath, ſtanding on footſtalks which are very hairy.

STIPULÆ next the root, numerous, oval and pointed, of a membranous texture.

FLOWER-STALKS numerous, aſcending, round, hairy, ſupporting two flowers, and furniſhed with a three-leav'd bractea.

FLOWERS white and ſmall

CALYX: a Perianthium of one leaf, flat, divided half way down into ten ſegments, *fig.* 3. of thoſe, five which are betwixt the petals are oval, with a long point, ſomewhat longer than the petals *fig.* 1. five lanceolate, a little ſhorter than the petals, and all of them hairy. *fig.* 1.

COROLLA: five, white, ſmall, roundiſh, ſpreading Petals, remote from each other, and fixed to the calyx. *fig.* 2.

STAMINA: about twenty Filaments, placed in a circle, tapering, white, at firſt bending inwards, afterwards upright, ſhorter than the corolla; Antheræ yellow, having two cavities. *fig.* 4. 5

PISTILLUM: Germina numerous, minute, forming a little head, ſomewhat kidney-ſhaped; Styles ſimple, inſerted into the ſide of the germen; Stigmata ſimple, fig. 7, 8, 9.

RECEPTACLE of the *flower* betwixt the germina and filaments glandular or pulpy, villous and of a ſcarlet colour, of the *fruit* betwixt the germina hairy. *fig.* 6.

SEEDS numerous, pulpleſs, forming a little head, of a yellowiſh brown colour, with an appendage to each ſomewhat villous. *fig.* 10. 11.

THE name of Sterilis by which this ſpecies of Strawbery is diſtinguiſhed, has not been given it becauſe the plant does not produce perfect ſeed, but becauſe it affords no eatable fruit; its leaves point it out as a Strawberry, but its fructification has a greater affinity with the Potentilla, betwixt which genus and the Strawberry this plant indeed ſeems to be the link.

In all the woods about London, as alſo on ſome heaths, we find it in bloſſom as early as March, and in June it ripens its ſeed.

TYPHA MAJOR. GREATER CATSTAIL.

TYPHA *Linnæi Gen. Plant.* MONOECIA TRIANDRIA.

MASC. Amentum cylindricum. *Cal.* obſoletus, 3 phyllus, *Cor.* 0. FEM. Amentum cylindricum, infra maſculos. *Cal.* capillo villoſo. *Cor.* 0. Sem. 1. inſidens pappo capillari.

Raii Syn. HERBÆ GRAMINIFOLIÆ NON CULMIFERÆ FLORE IMPERFECTO SEU STAMINEO.

TYPHA *latifolia* foliis ſubenſiformibus, ſpica maſcula femineaque approximatis. *Lin. Syſt. Vegetab.* p. 702. *Sp. pl.* 1377.

TYPHA clava unica. *Haller. hiſt. n.* 1305.

TYPHA latifolia. *Scopoli Fl. Carniol.* p. 214.

TYPHA paluſtris major. *Bauhin.* p. 20.

TYPHA paluſtris maxima. *Parkinſon,* 1204.

TYPHA *Ger. emac.* 46. *Raii Syn.* p. 436. Great Catſtail or Reed-mace. *Hudſon. Fl. Angl. ed.* 2. p. 400. *Lightfoot. Fl. Scot.* 538.

RADIX perennis, repens, craſſitie pollicis, articulata, ſpongioſa, radiculis, fibrilloſis, albidis inſtructa, ſurculi albidi, teneri, in mucronem rigidam abeuntes, more tritici canini.	ROOT perennial, creeping, the thickneſs of one's thumb, jointed, ſpongy, furniſhed with ſmall fibrous roots of a whitiſh colour, the young ſhoots white, tender, terminating in a ſharp hard point, like that of the common couch graſs.
CULMUS tripedalis ad ſexpedalem, ſimplex, erectus, folioſus, teres, lævis.	STALK from three to ſix feet high, ſimple, upright, leafy, round and ſmooth.
FOLIA alterna, erecta, tortuoſa, baſi ſubenſiformia, carnoſa, ſuperne plana, glauca, unciam fere lata, bi aut tripedalia, longiſſimâ vaginâ caulem involventia.	LEAVES alternate, upright, twiſted, at bottom ſword ſhaped and fleſhy, at top flat, and of a blueiſh colour, about an inch in breadth and two or three feet in length, incloſing the ſtalk in a very long ſheath.
SPATHÆ duæ, deciduæ, una ad ſpicæ maſculæ baſin, altera ad ejus medium.	SHEATHS two, deciduous, one placed at the bottom of the male ſpike, the other at the middle.
FLORES maſculi numeroſiſſimi in Amento erecto, culmum terminante.	FLOWERS of the male very numerous, in an upright Catkin, terminating the ſtalk.
CALYX, nullus.	CALYX wanting.
COROLLA, nulla.	COROLLA wanting.
STAMINA: FILAMENTUM antequam antheræ pollinem dimittunt, breviſſimum, ſuſtinens Antheram unam ad quatuor, demiſſo polline pendulum, et antheris longius; ANTHERÆ oblongæ, flavæ, quadriſulcatæ, glandulâ vireſcente terminatæ. *fig.* 1. 2. 3. 4.	STAMINA: the FILAMENT before the ſhedding of the pollen is very ſhort, ſuſtaining from one to four Antheræ, the pollen being ſhed, they hang down and become longer than the antheræ; ANTHERÆ oblong, yellow, with four grooves, and terminated by a greeniſh gland. *fig.* 1. 2. 3. 4.
FLORES feminei numeroſiſſimi, in amento, maſculino ſubjecto et contiguo.	FLOWERS of the female extremely numerous, in a catkin placed under and contiguous to the male catkin.
PISTILLUM: GERMEN ovatum, minimum, pedunculo brevi inſidens; STYLUS ſuperne incraſſatus; STIGMA nigrum.	PISTILLUM: GERMEN oval, very minute, ſitting on a ſhort footſtalk; STYLE thickened above; STIGMA black.
SEMEN minimum. pedunculatum, ariſtatum, pedunculo pappoſo. *fig.* 5.	SEED very ſmall, ſitting on a footſtalk, and terminated by an ariſta, the footſtalk downy, *fig.* 5.
RECEPTACULUM amenti maſculi piloſum.	RECEPTACLE of the male-catkin hairy.

THE appearance of the *Typha Major*, when its ſpike is nearly ripe, is ſufficiently ſtriking to engage the attention even of the moſt incurious; it is not therefore to be wondered at, that Gentlemen, who are fond of Plants, ſhould introduce it on the edges of their ponds, or that Painters ſhould make it a conſpicuous Plant in their repreſentations of water; the Gentleman ſhould however be apprized, that it has a creeping root, which encreaſes very much, ſoon choaks up a ſmall piece of water, and overpowers other aquatics; thus difficult to keep within proper bounds, the moſt eligible mode of cultivating it is found to be in ſome border of the garden, where, if the ſoil be moiſt, it will flouriſh and produce ſpikes more abundantly than in the water.

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Sansom Sculp

Typha major

Sansom Sculp

Typha minor

The quantity of impregnating duſt contained in the male ſpike is exceedingly great, though proportioned indeed to the aſtoniſhing number of ſeeds in the female ſpike below; if theſe ſeeds are endowed with a vegetative power, (and that they are not I cannot aſſert from experiment) Nature will appear to have been unuſually ſolicitous in the preſervation of this Plant; but it often happens, as elſewhere has been obſerved, that many of thoſe plants which encreaſe very much by their roots ſeldom produce perfect ſeed, as in the Moneywort, Butterbur, Water Violet, &c. here indeed the ſeed appears to come to its greateſt perfection; they are, it is true, exceedingly minute, but this is no argument againſt their growth, as the ſeeds of the Ferns, which are infinitely ſmaller, are known to vegetate, and ſo are thoſe of the Moſſes, which are yet ſmaller; for, whatever ſome Botaniſts may aſſert to the contrary, the fine powder contained in their capſules, is as much ſeed as that contained in the capſules of the Ferns.

To aſcertain the fact relative to the Typha, and to learn whether it encreaſes in any conſiderable degree from the ſeed, I propoſe ſticking round ſome pond where it is not known to grow, ſeveral ſpikes with the ſeeds juſt beginning to blow off, and ſhall relate the effects of this experiment under the *Sparganium*, or Burreed.

The parts of fructification in this plant being very minute, are with difficulty inveſtigated. Linnæus, who examined and deſcribed them without the aſſiſtance of a magnifier, is therefore excuſable, if he has not been ſo minutely accurate in his deſcription of them, as he is in moſt others.

The Calyx which he deſcribes does not appear to be the Calyx, but rather ſome of the hairs proceeding from the receptacle, and which indeed appear more evidently to be ſo, from the hairy appearance of the receptacle when the ſtamina are dropt off; on one Filament are ſupported one, two, three, or four Antheræ, and that indiſcriminately, ſo that there does not appear to be any great propriety in placing it in the order Triandria, it would be much leſs puzzling, and perhaps more agreeable to the ſyſtem, to place it in the order Polyandria, there being many ſtamina, and all of them united to one receptacle.

The uſes to which this plant are applied are but few.

The Roots are ſaid to be eaten as a ſallad. *Haller. hiſt. ex. auct. Gledit.*

The downy ſeeds ſerve for ſtuffing pillows. *Haller. hiſt.*

Coopers uſe the leaves to faſten the hoops round their caſks. *Lin. ex auct. Ruppii.*

According to HALLER, cattle eat the leaves which are ſuſpected to be poiſonous by SCHREBER.

It grows in ponds, ditches, and by the ſides of rivers in many places about London, and flowers in July.

TYPHA MINOR. SMALLER CATSTAIL.

TYPHA *Linnæi Gen. Pl.* MONOECIA TRIANDRIA.

MASC. Amentum cylindricum. *Cal.* obſoletus, 3 phyllus *Cor.* 0. FEM. Amentum cylindricum, infra maſculos. *Cal.* capillo villoſo. *Cor.* 0. Sem. 1. inſidens pappo capillari.

Raii Syn. HERRÆ GRAMNIIFOLIÆ NON CULMIFERÆ FLORE IMPERFECTO SEU STAMINEO.

TYPHA *anguſtifolia* foliis ſemicylindricis, ſpica maſcula femineaque remotis. *Lin. Syſt. vegetab.* p. 702. *Sp. pl.* 1377.

TYPHA clava maſcula a feminina remota. *Haller. hiſt.* 1306.

TYPHA anguſtifolia. *Scopoli. Fl. Carniol.* p. p. 214.

TYPHA paluſtris minor. *Bauhin pin.* p. 20.

TYPHA minor *Parkinſon*, 1204. *Raii Syn.* 436.

Hudſon. Fl. Angl. ed. 2. p. 400.

THE Typha Minor is a much ſcarcer plant about London than the Major, from which it differs ſpecifically in having much narrower leaves and ſlenderer ſpikes, the male ſpike being alſo diſtant from the female about an inch; in the ſtructure of its parts and its general œconomy it reſembles the other.

I have obſerved it growing near Baterſea, where it is now deſtroyed; alſo on the middle of Woolwich Common, where the Botaniſt may probably find it a hundred years hence. It flowers at the ſame time as the Major.

“ The common yellow vetchling, *Lathyrus pratenſis*, or everlaſting-tare, might likewiſe be on many occaſions
“ cultivated with profit by the farmer. It grows with great luxuriance in ſtiff clayey ſoils, and continues to yield
“ annually for any length of time, a great weight of forage, which is deemed to be of the very beſt quality: and
“ as it is equally fit for paſture or for hay, the farmer would have it in his power to apply it to the one or the
“ other of theſe uſes, at any period that might beſt ſuit his convenience.—It is likewiſe attended with this farther
“ advantage, that as it continues to grow with equal vigour in the end of ſummer as in the beginning
“ thereof, it would admit of being paſtured upon in the ſpring, till the middle or even the end of May, ſhould
“ it be neceſſary; without endangering the loſs of the crop of hay: which cannot poſſibly be done with rye-graſs,
“ or any other plant uſually cultivated by the farmer, except clover; which is equally unfit for early paſture or
“ for hay. This plant would be the more valuable to the farmer that it grows to the greateſt perfection on ſuch
“ ſoils as are altogether unfit for producing ſain-foin; the only plant hitherto cultivated that ſeems to poſſeſs qualities
“ approaching to thoſe of this one.—It muſt, however, be acknowledged, that the difficulty of procuring ſeeds
“ of this plant in abundance, muſt be a very great bar to the general cultivation thereof: for although theſe ripen
“ very well in our climate, yet the quantity that it produces is ſo inconſiderable, and the difficulty of getting them
“ ſeparated from the pod is ſo great, as to make it neceſſary to gather them by the hand; in which way the
“ quantity obtained muſt be very trifling. To counterbalance this defect, however, it may be obſerved, that it is
“ not only an abiding plant, which never leaves the ground where it has been once eſtabliſhed; but that it alſo
“ increaſes ſo faſt by its running roots, that a very few plants at firſt put into a field, would ſoon ſpread over the
“ whole and ſtock it ſufficiently. If a ſmall patch of good ground is ſowed with the ſeeds of this plant in
“ rows about a foot diſtant from one another, and the intervals be kept clear of weeds for that ſeaſon, the
“ roots will ſpread ſo much as to fill up the whole patch next year; when the ſtalks may be cut for green fodder
“ or for hay. And if that patch were dug over in the ſpring following, and the roots taken out with the hand,
“ it would furniſh a great quantity of plants, which might be planted in ſuch fields as you meant to have filled
“ with this, at the diſtance of two or three feet a-part; which would probably there take root, and quickly
“ overſpread the whole field. And as there might always be a ſufficient quantity of the roots left to fill again
“ the patch from whence they were taken, it would be ready to furniſh a freſh ſupply the next ſeaſon, and
“ might thus continue to ſerve as a nurſery for ever afterwards. It appears to me, that this would be the moſt
“ likely method of propagating this plant with eaſe; but I have not as yet had ſufficient experience thereof to
“ be able either to tell preciſely the expence of it, or to anſwer poſitively for the ſucceſs thereof in all caſes.”

LATHYRUS PRATENSIS. MEADOW VETCHLING.

LATHYRUS *Linn. Gen. Pl.* DIADELPHIA DECANDRIA.

Stylus planus, ſupra villoſus, ſuperne latior.
Cal. laciniæ ſuperiores 2 breviores.

Raii Syn. Gen. 23 HERBÆ FLORE PAPILIONACEÆ SEU LEGUMINOSÆ.

LATHYRUS *pratenſis* pedunculis multifloris, cirrhis diphyllis ſimpliciſſimis: foliolis lanceolatis. *Lin. Syſt. Vegetab.* p. 552. *Sp. pl.* p. 1033.

LATHYRUS ſcapis multifloris, foliis lanceolatis, capreolis ſimplicibus. *Haller. hiſt.* 436.

LATHYRUS pratenſis. *Scopoli Fl. Carniol.* p. 64.

LATHYRUS ſylveſtris luteus, foliis viciæ. *Bauhin. pin.* 344.

LATHYRUS luteus ſylveſtris dumetorum. *Bauh: hiſt.* 2. p. 304. *t.* 304.

LATHYRUS ſylveſtris flore luteo. *Ger. emac.* 1231. *Park.* 1062. *Raii Syn.* p. 320. Tare-everlaſting, common yellow baſtard Vetchling.

Hudſon, Fl. Angl. p. 317. *ed.* 2. *Lightfoot Fl. Scot.* p. 391. *Oeder. Fl. Dan. ic.* 527.

RADIX perennis, albida, repens.

CAULIS pedalis, etiam tripedalis et ultra, debilis, cirrhis ſuſtentatus, angulatus, ſubpiloſus, ramoſus.

FOLIA bina, lanceolata, trinervia, ſubtus villoſula.

PETIOLI trigoni, ſubpiloſi, longitudine ſtipularum.

STIPULÆ ſemiſagittatæ, latitudine foliorum, hamis duobus ſubinde inſtructi.

PEDUNCULI tetragoni, longi, ſuboctoflori.

FLORES lutei, erecti, racemoſi, ſecundi.

PEDICELLI teretes, villoſi, longitudine calycis.

CALYX: PERIANTHIUM monophyllum, tubulatum, breve, cylindraceum, ſubpiloſum, quinquedentatum, dentibus acuminatis, inferioribus longioribus, ſurſum pauliſper curvatis, *fig.* 1.

COROLLA papilionacea, *vexillum* ſubemarginatum, reflexum, prope baſin ſuperne foveis duabus intus prominentibus notatum *fig.* 2; *Alæ* duæ; apice rotundatæ *fig.* 3; *Carina* longitudine alarum. *fig.* 4.

STAMINA: FILAMENTA diadelpha, (ſimplex et novemfidum, *fig.* 5. 6. aſſurgentia; ANTHERÆ ſubrotundæ, flavæ.

PISTILLUM: GERMEN viride, compreſſum, oblongum; STYLUS erectus, ſuperne latior apice acuto; STIGMA a medietate ſtyli ad apicem antice villoſum. *fig.* 7. a ſculptore male expreſſum.

PERICARPIUM: *Legumen* ſeſquiunciale, compreſſum, nigricans, continens *Semina* octo ad duodecim, ſubrotunda.

ROOT perennial, whitiſh and creeping.

STALKS a foot high, ſometimes even three feet or more, weak, ſupported by its tendrils, angular, ſlightly hairy, and branched.

LEAVES growing in pairs, lanceolate, having three ribs, and ſlightly downy underneath.

LEAF-STALKS three-cornered, ſomewhat hairy, the length of the ſtipulæ.

STIPULÆ in the ſhape of an half arrow, the breadth of the leaves, ſometimes having two projections behind.

FLOWER-STALKS four cornered, long, ſupporting about eight flowers.

FLOWERS yellow, upright, growing in a bunch, all one way.

PARTIAL FLOWER-STALKS round, villous, the length of the calyx.

CALYX: a PERIANTHIUM of one leaf, tubular, ſhort, cylindrical, ſomewhat hairy, furniſhed with five teeth, which are long and pointed, the lowermoſt longeſt, and bent a little upwards.

COROLLA papilionaceous, *Standard* ſlightly notched, turned back, on the upper ſide near the baſe marked with two little cavities which project inwards, *fig.* 2; *Wings* rounded at top *fig.* 3; *Keel* the length of the wings *fig.* 4.

STAMINA: ten FILAMENTS, riſing upwards, nine united together, and one forming a ſeparate body; *fig.* 5. 6. ANTHERÆ roundiſh and yellow.

PISTILLUM: GERMEN green, flattened, oblong; STYLE upright, broadeſt above with a pointed top; STIGMA from the middle of the ſtyle to the top villous on the fore part, *fig.* 7. badly expreſſed in the engraving.

SEED-VESSEL a *Pod* an inch and an half long, flatten'd, of a blackiſh colour, containing from eight to twelve roundiſh *Seeds*.

THE following obſervations on this plant by the ingenious author of Eſſays relating to Agriculture and rural Affairs, will not be unacceptable to ſuch of our readers as are fond of Huſbandry and rural improvements; before I had ſeen his remarks, I had often thought it a plant which at leaſt deſerved a trial, and might, in particular ſoils, be cultivated to advantage. I remember once in particular to have ſeen a piece of ſtiff ſoil belonging to Lord Loughborough, at his ſeat near Mitcham, which produced an excellent crop of paſturage, conſiſting chiefly of this plant, and the Feſtuca pratenſis.

It grows very frequently in paſtures and hedges, and flowers in June and July.

Sansom sculpt

Lathyrus pratensis

Rumex obtusifolium

Sansom Sculp

RUMEX OBTUSIFOLIUS. BROAD LEAVED DOCK.

RUMEX *Linnæi Gen. Pl.* HEXANDRIA TRIGYNIA.

Cal. 3 phyllus. *Petala* 3 conniventia. *Sem.* 1 triquetrum.

Raii Syn. Gen. 5. HERRÆ FLORE IMPERFECTO SEU STAMINEO VEL APETALO POTIUS.

RUMEX *obtuſifolius* floribus hermaphroditis, valvulis dentatis graniferis, foliis cordato-oblongis obtuſis pubeſcentibus. *Lin. Syſt. Vegetab.* p. 285. *Sp. Pl.* 478. *Fl. Suecic.* n. 315.

LAPATHUM foliis ovatis, circa petiolum emarginatis, floribus denſe paniculatis, dentatis, verrucoſis. *Haller. hiſt. Helv.* n. 1592.

LAPATHUM vulgare folio obtuſo. J. B. II. 984.

LAPATHUM ſylveſtre, folio ſubrotundo. *Bauh.* p. 115.

LAPATHUM ſylveſtre, folio minus acuto. *Ger. emac.* 388.

LAPATHUM ſylveſtre vulgatius. *Park.* 1225.

Raii Syn. p. 141. The moſt common broad leaved wild Dock.

Hudſon. Fl. Angl. ed. 2. p. 155. *Lightfoot Fl. Scot.* p. 189.

RADIX perennis, in terram alte et recte deſcendens, fuſiformis, craſſitie digiti intermedii, foris ſordide fuſca, intus flaveſcens, in junioribus ſimplex, in annoſis multiplex, ramoſus.	ROOT perennial, running deeply and ſtraightly into the earth, tapering, the thickneſs of the middle finger, on the outſide of a dirty brown colour, internally yellowiſh, in the young ones ſimple, in the old ones divided into many branches.
CAULIS tripedalis, erectus, ad baſin uſque ramoſus, teres, lævis, ſuperne ſcabriuſculus, ſulcatus, ſolidus, geniculatus, geniculis ſtipulis obſoletis, marceſcentibus veſtitis.	STALK three feet high, upright, branched down to the bottom, round, ſmooth, upwards ſlightly rough, grooved, ſolid and jointed, joints covered with obſolete, withered ſtipulæ.
FOLIA radicalia, cordato ovata, petiolata, obtuſiuſcula, ſubtus venoſa, nervo medio ſæpius ruberrimo, caulina acuta, ſubundulata.	LEAVES next the root of an heart ſhaped oval form, ſtanding on footſtalks, bluntiſh, veiny underneath, the middle generally very red, thoſe on the ſtalk pointed and ſomewhat waved.
PETIOLI ſubtus rotundati, ſuperne plano-concavi.	LEAF-STALKS round underneath, above plano-concave.
RACEMI florum axillares, ſuberecti, nudiuſculi.	FLOWER-BRANCHES, proceeding from the alæ of the leaves, nearly upright, and furniſhed with but few leaves.
CALYX: PERIANTHIUM triphyllum, foliolis lanceolato-linearibus, concavis, margine membranaceis, corollâ brevioribus.	CALYX: a PERIANTHIUM of three leaves, which are of a ſhape betwixt lanceolate and linear, hollow, membranous at the edges, and ſhorter than the corolla.
COROLLA: PETALA tria, ovata, obtuſiuſcula, patentia, margine membranacea.	COROLLA: three oval PETALS, bluntiſh, ſpreading, membranous at the edges.
STAMINA: FILAMENTA ſex, breviſſima, alba; ANTHERÆ ſublineares, flavæ, apice bifidæ.	STAMINA: ſix Filaments, very ſhort and white; ANTHERÆ ſomewhat linear, yellow and forked at top.
PISTILLUM: GERMEN trigonum; STYLI tres, capillares, reflexi, inter rimas petalorum conniventium exſerti; STIGMATA laciniata.	PISTILLUM: GERMEN three cornered, STYLES three, very fine, turning back, and projecting from betwixt the cloſed petals.
PERICARPIUM nullum: Corolla trivalvis, connivens, includens ſemen; valvulis ovato-acutis, venoſis, margine denticulatis, unica granifera. *fig.* 1. 2. 3.	SEED-VESSEL none: the Corolla, which is compoſed of three valves, cloſes and contains the ſeed; the valves are oval, pointed, and veiny, toothed on the edge, one of them bearing a granule. *fig.* 1. 2. 3.
SEMEN unicum, triquetrum, fuſcum.	SEED ſingle, three cornered and brown. *fig.* 4.

OF all our Engliſh Docks, this perhaps may be ſaid to be the moſt common, and conſidered as a weed the moſt pernicious, being the largeſt and moſt ſpreading, except the Water Dock, and refuſed by cattle in general; hence the Huſbandman who wiſhes to ſee his grounds neat and clean has a rooted enmity to it, and for its deſtruction an inſtrument, called a Docking Iron, has been invented by ſome one more ingenious than the reſt, which is frequently made uſe of; the purpoſe of this inſtrument is to draw the plant up by the root, from an idea, that if it was cut down ever ſo cloſe, while any part of the root remained, it would grow again; but this idea has perhaps been too haſtily aſſumed, *frequent mowing moſt certainly deſtroys it*, and frequent ſpudding it is preſumed would have the ſame effect, but unleſs it be done carefully, and at ſtated periods, little good is to be expected.

In all ſorts of cultivated ground, in Farm Yards, Courts, by the ſides of Ditches, and elſewhere, we find this ſpecies moſt abundantly, it flowers at the latter end of June, and ripens its ſeed in July and Auguſt.

Our preſent plant is ſubject to as little variety as any of the Docks, its broad bottom leaves readily diſtinguiſh it, and theſe, though they may differ ſomewhat in ſize according as the ſoil is more or leſs luxuriant, vary but little in their ſhape, in general the younger the plant the more obtuſe are its radical leaves.

Orchis Morio. Meadow Orchis.

ORCHIS *Linn. Gen. Pl.* Gynandria Diandria. *Nectarium* corniforme pone florem.

Raii Syn. Gen. 26 Herbæ radice bulbosa præditæ.

ORCHIS *Morio* bulbis indiviſis, nectarii labio quadrifido crenulato: cornu obtuſo adſcendente, petalis obtuſis conniventibus. *Lin. Syſt. Vegetab.* p. 674. *Sp. Pl.* p. 1333. *Fl. Suec.* n. 794.

ORCHIS radicibus ſubrotundis, petalis galeæ lineatis, labello trifido crenato, medio ſegmento emarginato. *Haller. hiſt. n.* 1281. t. 33.

ORCHIS *Morio. Scopoli Fl. Carniol.* n. 1110.

ORCHIS morio femina. *Bauhin. pin.* 82. *Parkins.* 1347.

CYNOSORCHIS morio femina. *Ger. emac.* 208. *Raii Syn.* 377. The Female Fool-ſtones.

Hudſon, Fl. Angl. ed. 2. p. 383. *Lightfoot Fl. Scot.* p. 514. *Oeder. Fl. Dan. Tab.* 253

RADIX: *Bulbi* duo, ſubrotundi, magnitudine nucis avellanæ aut etiam moſchatæ, ſuperne ut in pleriſque hujus generis fibris majuſculis patentibus instructi, odore ſubhircino.	ROOT: two roundiſh *Bulbs* of the ſize of a hazel nut or even of a nutmeg, above as in moſt of the plants of this tribe furniſhed with largiſh ſpreading fibres, ſmelling ſtrong and rank.
SCAPUS ſpithamæus, ad pedalem et ultra, erectus, folioſus.	STALK from ſix or ſeven inches to a foot or more in height, upright and leafy.
FOLIA amplexicaulia, lanceolata, lineata, ſuperne nitida, inferne ſubargentea, ima reflexa, et quodammodo intorta.	LEAVES embracing the ſtalk, lanceolate, marked with lines, ſhining on the upper ſide, underneath ſilvery, the bottom ones for the moſt part turning back and variouſly contorted.
FLORES pauciores, ſex ſive octo, raro ultra duodecim, purpurei, laxe diſpoſiti.	FLOWERS few in number, from ſix to eight, ſeldom more than twelve, of a purple colour, ſitting looſely on the ſtalk.
BRACTÆA longitudine fere germinis, purpuraſcens, incumbens.	BRACTÆA or Floral leaf, almoſt the length of the germen, purpliſh and incumbent.
COROLLA: Petala quinque, omnibus in galeam conveníntibus, quorum duo exteriora preſertim lineis quinque parallelis, viridibus notantur.	COROLLA: five Petals, all of which cloſe together and form the helmet, of theſe the two outermoſt are ſtrikingly marked with green parallel lines.
LABELLUM amplum, purpureum, medio albidum, punctatum, trilobum, lobis lateralibus deflexis, medio breviore emarginato, omnibus ſerrulatis. *Calcar* longitudine fere germinis, ſubemarginatum, ſurſum tendens.	LIP large, rupple, whitiſh in the middle and dotted, having three lobes, of which the two ſide ones turn downward, the middle one ſhorteſt with a notch in it, all of them finely ſawed. *Spur* nearly the length of the germen, ſlightly notched at top and tending upward.
STAMINA: Filamenta duo; Antheræ virides, clavatæ, bilamellatæ. *fig.* 2. 3. 5.	STAMINA: two Filaments; Antheræ green, club-ſhaped, ſplitting into two lamellæ. *fig.* 2. 3. 5.

Moſt of the plants of the Orchis tribe as already has been obſerved have bulbous roots which are yearly renewed, they do not however encreaſe in that abundant manner which many other bulbous-rooted plants are known to do; as yet I have not heard of any one that has raiſed them from ſeed, nor can I boaſt a fact of that kind myſelf, yet frequent obſervation almoſt confirms me in the opinion that they muſt be propagated from ſeed, if this be not admitted, how ſhall we account for ſo many young plants being found together as are frequently obſerved? I have myſelf ſeen from twenty to thirty young plants of the Bee Orchis growing within a foot of each other, and it is well-known they ſeldom or never encreaſe by the root; accurate and repeated obſervation in natural hiſtory is capable of producing much information, and will it is hoped e're long ſatisfactorily elucidate this doubtful ſubject.

Some writers on the Materia Medica have pronounc'd this to be the true plant which produces the oriental Salep, while others ſuppoſe it to be ſome other ſpecies, there is one circumſtance which makes it impoſſible that this ſpecies ſhould produce all the Salep as many of the roots in that drug appear palmated like thoſe of the *Orchis Maculata*, whereas had they been the produce of the *Orchis Morio* they would all have appeared round, it would therefore appear moſt probable that the Salep is formed from a number of the different ſpecies mixed together; there ſeems to be no propriety in confining it to this ſpecies alone, the *maſcula*, the *maculata*, the *bifolia*, and ſome others have as large or larger roots than this, and their quality appears to be the ſame.

The *Orchis Morio* grows in meadows that are moderately dry, ſuch as the Cowſlip is uſually found in, and ſometimes they are ſo numerous as to empurple the ſpot they grow on.

It aſſumes all the changes of colour from a deep purple to a white, indeed there is no Orchis more variable in this reſpect, but in all its varieties it retains more or leſs ſtrongly the green lines on its ſide petals which obviouſly diſtinguiſh it from all our other Orchis's.

It flowers in May and June.

Orchis Morio

Sansom Sculp

Medicago polymorpha.

MEDICAGO ARABICA. HEART MEDICK, or CLAVER.

MEDICAGO *Lin. Gen. Pl.* DIADELPHIA DECANDRIA. *Legumen* compreſſum, cochleatum, *Carina* corollæ a vexillo deflectens.

Raii Syn. Gen. 23. HERBÆ FLORE PAPILIONACEO SEU LEGUMINOSÆ.

MEDICAGO *polymorpha* leguminibus cochleatis, ſtipulis dentatis caule diffuſo. *Lin. Syſt. Vegetab.* p. 577. *Sp. pl.* 1097.

MEDICA foliis emarginatis, ſerratis, racemis paucifloris, ſiliquis globoſis echinatis. *Haller. hiſt.* n. 383.

MEDICAGO *polymorpha. Scopoli Fl. Carn.* n. 942.

TRIFOLIUM cochleatum folio cordato maculato. *Bauhin. pin.* 329.

TRIFOLIUM cordatum *Ger. emac.* 1190. *Park.* 1115. *Raii Syn.* 333. Heart Trefoil or Claver. *Hudſon. Fl. Angl. ed.* 2. p. 331.

RADIX annua, fibroſa.

CAULES plures, pedales, et ultra, procumbentes, angulati, ſtriati, purpuraſcentes, piloſi, ramoſi.

FOLIA terna, obcordata, mucronata, obſolete ſerrata, lævia, maculâ purpurea in medio notata.

PETIOLI ſuperne canaliculati, piloſi.

STIPULÆ binæ, ſemiſagittatæ, ſerratæ.

FLORES plerumque bini, pedicellati, pedunculis teretibus, piloſis, petiolis brevioribus; *Bractæa* minima, ad baſin cujuſvis pedicelli, et ſeta piloſa inter floſculos longitudine florum.

CALYX: PERIANTHIUM monophyllum, tubuloſum, ſubcampanulatum, piloſum, ſemiquinquefidum, laciniis acuminatis, ſubæqualibus, purpuraſcentibus. *fig.* 1.

COROLLA papilionacea, flava; *Vexillum* ſubrotundum, emarginatum, reflexum, lineis ſaturate flavis ad baſin notatum. *fig.* 2. *Alæ* duæ, parvæ, vexillo breviores, croceæ, apice paulo ſecedentes. *Carina* concava, obtuſa, alis paulo longior.

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STAMINA: FILAMENTA diadelpha, coalita fere a apices, tubus ſurſum curvatus; ANTHERÆ minimæ, flavæ. *fig* .3. 4.

PISTILLUM: GERMEN viride, oblongum, ſubtus ubi ſtylus incipit emarginatum, cito ſeſe ſpiraliter contorquens, et ſuperne ſpinulas agens; STYLUS ſubulatus, erectus; STIGMA terminale, minimum. *fig.* .5 6.

PERICARPIUM: *Legumen* ſubrotundo-cylindraceum, utrinque truncatum, ſpinuloſum, ſpiraliter contortum *fig.* 7.

SEMEN majuſculum, reniforme, flaveſcens. *fig.* 8.

ROOT annual and fibrous.

STALKS numerous, about a foot in length, or more, procumbent, angular, ſtriated, purpliſh, hairy, and branched

LEAVES growing three together, inverſely heart-ſhaped, terminated by a ſhort point, faintly ſawed, ſmooth, with a purple ſpot in the middle of each.

LEAF-STALKS above grooved and hairy.

STIPULÆ two, the ſhape of half an arrow, and ſerrated.

FLOWERS growing generally two together, ſtanding on footſtalks which are round, hairy, and ſhorter than the footſtalks; *Bractæa* very ſmall, at the baſe of each flower-ſtalk, and a hairy ſeta or briſtle betwixt the flowers of the ſame length with the flowers.

CALYX: a PERIANTHIUM of one leaf, tubular, ſomewhat bell-ſhaped, hairy, divided half way down in five ſegments, which are pointed, nearly equal and purpliſh. *fig.* 1.

COROLLA papilionaceous, and yellow; *Standard* roundiſh, notched at the end, and turning back, marked at its baſe with lines of a deeper yellow colour. *fig* 2. *Wings* two, ſmall, ſhorter than the ſtandard, ſaffron coloured, ſeparating a little from one another at the tips. *Keel* hollow, blunt, a little longer than the wings. *fig.*

STAMINA: FILAMENTS uniting into two bodies almoſt to the tips, tube bending upward; ANTHERÆ very minute and yellow. *fig.* 3. 4.

PISTILLUM: GERMEN green, oblong, below where the ſtyle begins notched, ſoon ſpirally twiſting itſelf, and from its upper part throwing out little ſpines; STYLE tapering, upright; STIGMA terminal, and very minute. *fig.* 5. 6.

SEED-VESSEL: a *Pod* of a roundiſh cylindrical ſhape, cut off at each end, ſpinous, and ſpirally twiſted up. *fig.* 7.

SEED rather large, kidney-ſhaped, and yellowiſh. *fig.* 8.

The plant here figured is intended to repreſent the *Trifolium cochleatum folio cordato maculato* of BAUHINE and RAY and the *Medicago polymorpha var. arabica* of LINNÆUS; how far it is in itſelf a variety, how far LINNÆUS and ſome other authors are juſtified in making ſo many varieties of one ſpecies *, or how far others are right in dividing one genus into ſo many ſpecies eſpecially MONSIEUR GERARD, it would ill become me to determine, this plant and this only of the preſent tribe as far as I have hitherto ſeen is common in the neighbourhood of London; future obſervation added to culture may perhaps enable me hereafter to ſpeak more decidedly on the ſubject.

The preſent plant is ſubject to conſiderable variation in ſize as alſo with reſpect to the brightneſs of the ſpots on its leaves.

It flowers in May and June.

On the edges of Charlton Sand-pits it grows in very great plenty and is not uncommon on banks and the borders of fields in a variety of other places.

When it grows luxuriantly one is tempted to ſuppoſe that it wou'd afford good fodder for cattle, it ſeems at leaſt to deſerve a trial.

* *As the orbicularis, ſcutellata, tornata, turbinata, intertexta, arabica, coronata, ciliaris, hirſuta, rigidula, minima, muricata, nigra, laciniata. Linnæi Sſt. Vegetab. p.* 578.

CARDAMINE AMARA. BITTER LADIES-SMOCK.

CARDAMINE *Lin. Gen. Pl.* TETRADYNAMIA SILIQUOSA. *Siliqua* elaſtice diſſiliens, valvulis revolutis. *Stigma* integrum, *Calyx* ſubhians.

Raii Syn. Gen. 21. HERBÆ TETRAPETALÆ SILIQUOSÆ et SILICULOSÆ.

CARDAMINE *amara* foliis pinnatis axillis ſtoloniferis. *Lin. Syſt. Vegetab.* p. 497. p. 915. *Fl. Suecic.* n. 586.

CARDAMINE foliis pinnatis, ſubrotundis, anguloſis. *Haller. hiſt.* 474.

CARDAMINE ſtolonifera *Scopoli*, ic. 39 ?

NASTURTIUM aquaticum majus et amarum. *Bauh. pin.* 104.

CARDAMINE flore majore elatior. *Tourn. Inſt. R. H.* *Raii Syn.* 291. Bitter Creſſes.

Hudſon Fl. Angl. ed. 2. p. 294. *Lightfoot Fl. Scot.* p. 350.

RADIX perennis, tenuis, albida, repens.

CAULIS pedalis ad bipedalem, erectus, baſi ſtoloniferus, flexuoſus, ſubangulatus, glaber, ramoſus.

FOLIA *radicalia* magna, rotundata, ſubintegerrima; *caulina* ſubereċta, pinnata, pinnarum paria plerumque tria cum impari, pinnæ oblongæ, angulatæ, angulis denticulo terminatis, læves, margine ad lentem viſæ minutim ciliatæ, extimâ majori et in plures angulos diviſâ.

FLORES albi, pro magnitudine plantæ, minores, floſculis Cardamines pratenſis perquam ſimiles, nunquam vero colorati.

PEDUNCULI ebractæati, teretes, læves alterni.

CALYX: PERIANTHIUM tetraphyllum, foliolis concavis, erectis, flaveſcentibus, margine membranaceis, deciduis. *fig.* 1.

COROLLA: PETALA quatuor, ſuberecta, alba, baſi vireſcentia, oblongo-ovata, ſubemarginata, plana, lineis profundis exarata. *fig.* 2.

STAMINA: FILAMENTA ſex, quorum duo breviora, ſubulata, alba; ANTHERÆ incumbentes, purpureæ; apicibus convolutis. *fig.* 5. 3.

GLANDULÆ ut in Cardamine pratenſi. *fig.* 7.

GERMEN compreſſum, minute articulatum, longitudine ſtaminum; STYLUS brevis, *obliquus*; STIGMA minimum. *fig.* 4.

PERICARPIUM: *Siliqua* et *Semina* ſicut in Cardamine pratenſi, niſi majora. *fig.* 8. 9.

ROOT perennial, ſlender, whitiſh, and creeping.

STALK from one to two feet high, upright, at bottom throwing out runners from the alæ of the leaves, crooked, ſomewhat angular, ſmooth, ſhining, and branched.

LEAVES *next the root* large, round, and almoſt perfectly entire; *on the ſtalk* nearly upright, pinnated, conſiſting for the moſt part of three pair of pinnæ with an odd one, pinnæ oblong, angular, each angle terminated by a ſmall tooth or point, ſmooth, the edge, if viewed with a magnifier, appearing finely ciliated, the terminal pinna larger than the others, and divided into more angles.

FLOWERS white, conſidering the largeneſs of the plant rather ſmall, very like thoſe of the common Ladies-ſmock, but never coloured.

PEDUNCULES without any bractæa, round, ſmooth, and alternate.

CALYX: a PERIANTHIUM of four leaves, the leaves oblong, hollow, upright, yellowiſh, membranous at the edge, and deciduous. *fig.* 1.

COROLLA: four PETALS, ſomewhat upright, white, with a greeniſh baſe, of an oblong-oval ſhape, ſlightly notched, flat, with lines deeply engraven. *fig.* 2.

STAMINA: ſix FILAMENTS, two of which are ſhorter than the others, tapering and white; ANTHERÆ incumbent, purple, the top rolled up. *fig.* 5. 3.

GLANDS as in the common Ladies-ſmock. *fig.* 7.

GERMEN flat, finely jointed, the length of the ſtamina; STYLE ſhort and *oblique*; STIGMA very minute. *fig.* 4.

SEED-VESSEL: *Pod* and *Seeds* ſimilar to thoſe of the common Ladies-ſmock, but larger. *fig.* 8. 9.

The *Cardamine amara* differs from the *pratenſis* in divers reſpects, yet its affinity is ſo conſiderable as often to occaſion its being miſtaken for it; if the following characters, which diſtinguiſh it in particular from that plant, are attended to, the ſtudent will not eaſily be miſled.

The *Cardamine pratenſis* is a plant common in almoſt every wet meadow, this on the contrary is much more local, and rather affects to grow on the edges of rivulets and ſtreams of water, than in the open meadow; the ſtalk-leaves of the *pratenſis* are uſually narrow, the ſides cloſing almoſt together, theſe on the contrary are large, broad, and very angular, more reſembling indeed the water-creſs, from which ſimilarity this plant has obtained among the old Botaniſts the name of *Naſturtium*; it is in every reſpect a larger plant than the pratenſis, its bloſſoms excepted, which are nearly of the ſame ſize; and, as in the *pratenſis* they are always of a purple colour, more or leſs deep, ſo in this they are always perfectly white, the antheræ, which in the pratenſis are of a yellow colour, here form a ſtriking contraſt, and appear of a deep purple, and that, ſo far as I have obſerved, invariably, the tips of them are alſo more curled up; the ſtyle, which in the pratenſis is upright, in the amara has an unuſual obliquity in it, which I believe has not been noticed; towards the bottom of the ſtalk the *amara* is more diſpoſed to throw out runners from the alæ of the leaves than the pratenſis, but this character depends, in a conſiderable degree, on the circumſtances of ſituation, moiſture, &c. the *pratenſis* has a ſimilar diſpoſition in degree, and I have ſeen it throw out roots from the midrib of the bottom leaves.

This plant may be conſidered as one of our plantæ rariores, I have noticed it here and there on the banks of the Thames, and the creeks running from it about *Batterſea* and *Chelſea*, Mr. *Alchorne* has obſerved it about *Lewiſham*, and in the neighbourhood of *Uxbridge*, it grows in abundance.

It flowers in May, and ripens its ſeed in June.

Its virtues and uſes remain to be diſcovered, it has a ſtrong biting taſte of the creſs kind, but not that degree of bitterneſs which would juſtify the epithet *amara*.

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Cardamine amara.

Cardamine pratensis.

CARDAMINE PRATENSIS. COMMON LADIES-SMOCK.

CARDAMINE *Lin. Gen. Pl.* TETRADYNAMIA SILIQUOSA *Siliqua* elaſtice diſſiliens valvulis revolutis. *Stigma* integrum. *Cal.* ſubhians.

Raii Syn. Gen. 21. HERBÆ TETRAPETALÆ SILIQUOSÆ ET SILICULOSÆ.

CARDAMINE *pratenſis* foliis pinnatis: foliolis radicalibus ſubrotundis, caulinis lanceolatis. *Lin. Syſt Vegetab.* p. 497. *Sp. Pl.* 915. *Fl. Suec. n.* 585.

CARDAMINE foliis pinnatis, radicalibus ſubrotundis, caulinis linearibus. *Haller. hiſt.* n. 473.

CARDAMINE pratenſis, *Scopoli Fl. Carn.* n. 819.

NASTURTIUM pratenſe magno flore *Bauh.* p. 104.

FLOS CUCULI *Dod. pempt.* 592.

CARDAMINE *Ger. emac.* 259.

NASTURTIUM pratenſe majus ſive Cardamine latifolia. *Parkins* 285. *Raii Syn.* p. 299. Ladies Smock or Cuckow-flower.

Hudſon Fl. Angl. ed. 2. p. 294. *Lightfoot Fl. Scot.* p. 349.

RADIX perennis, craſſiuſcula, alba, multis fibris tenuibus capillata.

CAULIS dodrantalis, erectus, apice parum ramoſus, teres, obſolete anguloſus, lævis, firmus, purpuraſcens.

FOLIA *radicalia* ſæpius manca, in orbem ſparſa, pinnata, pinnis ſubrotundis, inequaliter tridentatis, extimo majori, et ſæpius quinque dentato, breviſſime pedicellata, levia; caulina pinnata, erecta, pinnis plurimis, confertis, ſublinearibus, concavis.

RACEMUS terminalis, pedunculatus, nudus, glaber.

CALYX: PERIANTHIUM tetraphyllum, foliolis ovato-oblongis, obtuſis, margine membranaceis, concavis, alternis baſi gibboſis, deciduis. *fig.* 1.

COROLLA cruciformis, dilute purpurea ſeu albida; *Petala* obovata, ſubemarginata, unguibus flaveſcentibus, longitudine calycis. *fig.* 2.

STAMINA: FILAMENTA ſex, ſubulata, quorum duo breviora, incurvata; ANTHERÆ cordato lineares, incumbentes, flavæ. *fig.* 3.

NECTARIUM: *Glandulæ* quatuor, quorum duo filamentorum breviorum baſin cingunt, duo extra baſin filamentorum longiorum locantur.

PISTILLUM: GERMEN cylindraceum, tenue; STYLUS breviſſimus; STIGMA capitatum, ſtaminibus paulo brevior. *fig.* 4. 5.

PERICARPIUM: *Siliqua* cylindraceo-compreſſa, bilocularis, bivalvis, valvulis dehiſcendo ſpiraliter revolutis. *fig.* 6. 7.

SEMINA plurima, compreſſa, flaveſcentia. *fig.* 8.

ROOT perennial, thickiſh, white, furniſhed with a large tuft of fine fibres.

STALK about nine inches high, upright, at top a little branched, round, ſcarce perceptibly angular, ſmooth, ſtiffiſh, with a purpliſh tinge.

LEAVES *next the root* frequently imperfect, ſpreading in a circular form, pinnated, the pinnæ roundiſh, running out into three unequal angles or teeth, the outermoſt largeſt, and having for the moſt part five angles, ſtanding on very ſhort footſtalks and ſmooth; thoſe on the ſtalk pinnated, upright, the pinnæ numerous, growing thickly together, ſomewhat linear and hollow.

RACEMUS, or Flower-bunch, terminal, furniſhed with footſtalks, naked and ſmooth.

CALYX: a PERIANTHIUM of four leaves, which are oval, obtuſe, membranous at the edge, hollow, the alternate ones gibbous at the baſe, and deciduous. *fig.* 1.

COROLLA croſs-ſhaped, of a pale purple or whitiſh colour; *Petals* inverſely oval, ſlightly notched, claws of a yellowiſh colour, the length of the calyx. *fig.* 2.

STAMINA: ſix Filaments, tapering, the two ſhorteſt of which bend inward; ANTHERÆ heart-ſhaped yet linear, incumbent and yellow. *fig.* 3.

NECTARY: four *Glands*, two of which ſurround the baſe of the ſhorteſt filaments, and two are placed on the outſide of the baſe of the long filaments.

PISTILLUM: GERMEN cylindrical, and ſlender; STYLE very ſhort; STIGMA forming a little head, and not quite ſo long as the ſtamina. *fig.* 4. 5.

SEED-VESSEL: a *Pod* cylindrical, and ſomewhat flattened, of two cavities and two valves, the valves in opening curling up. *fig.* 6. 7.

SEEDS numerous, flattened and yellowiſh. *fig.* 8.

The flowers of the *Cardamine pratenſis* were a few years ſince introduced into practice, and recommended as ſerviceable in various ſpaſmodic complaints by Sir W. BAKER, in the firſt volume of the *Medical Tranſactions*, ſuch as the convulſive Aſthma, ſpaſms of the abdominal and other muſcles, St. Vitus's Dance, Epilepſy, &c. the doſe recommended was from a ſcruple to half a drachm or more of the powder of the dried flowers, to be taken morning and evening.

From the diſuſe into which this medicine has fallen, it ſhould ſeem that it had not anſwered the expectations of ſucceeding practitioners neither here nor abroad. *Vid. Murray's Apparat. Medicam. V.* 2. p. 320.

It gives a name to the *Papilio Cardamine* or *Orange-tip Butterfly*, which according to LINNÆUS feeds on it.

Sometimes it is found with double flowers, in which ſtate it is kept in the gardens of the curious, where it requires a moiſt ſhady ſituation.

In the colour of its bloſſoms it is ſubject to much variation, they are uſually white, with a tinge of purple, and ornament our meadows in the delightful month of May, as deſcribed by Shakeſpeare in *Loves Labour loſt*:

> *When daiſies py'd and violets blue,*
> *And cuckow-buds of yellow hue,*
> *And* LADY-SMOCKS *all ſilver white*
> *Do paint the meadows with delight*, &c.

It probably acquired its plain Engliſh name of Lady-ſmock from the white appearance which its bloſſom gives to the meadows where it abounds, reſembling linen bleaching on the graſs:

> " *When maidens bleach their ſummer ſmocks*,"

a practice very general formerly, when moſt families ſpun and bleached their own linen.

CAREX PENDULA. PENDULOUS CAREX.

CAREX *Lin. Gen. Pl.* MONOECIA TRIANDRIA.

MASC. 1 phyllus. *Cor.* 0. FEM. Amentum imbricatum. *Cal.* 1 phyllus. *Cor.* 0. *Nectarium* inflatum, 3 dentatum. Germen triquetrum, intra nectarium.

Raii. Syn. Gen. 28 HERBÆ GRAMINIFOLIÆ NON CULMIFERÆ IMPERFECTO SEU STAMINEO.

CAREX ſpicis femininis pendulis longiſſimis, capſulis mucronatis ovatis. *Haller.* hiſt. 1396.

CAREX *pendula*, ſpicis ſubſeſſilibus pendulis, maſcula erecta, femineis cylindricis longiſſimis, capſulis ſubrotundis acuminatis. *Hudſon. Fl. Angl. ed.* 2 *p.* 411.

GRAMEN ſpica pendula longiore et anguſtiore *B. pin.* 6. *Pr.* 13. *J. B.* 11. 497.

GRAMEN cyperoides ſpica pendula longiore. *Parkins.* 1267. *Raii. Syn. p.* 420. Many-ſpiked Cyperus-graſs with long pendulous heads.

RADIX perennis, non vero repens.

CULMUS tripedalis, ad orgyalem in ſolo lætiori etiam accedit, triqueter, levis, ſuperne ſtriatus, folioſus.

FOLIA ſemunciam lata, viridia abſque ullâ glaucedine, oris nerviſque ſubaſperis, minute ſerrulatis, minus vero quam in multis aliis hujuſce generis.

SPICÆ: omnes pendulæ, ſuprema e floribus maſculis omnino compoſita, craſſa, baſi tenuior, ſecunda et tertia femineæ apice incraſſatæ, ubi androgynæ, inferiores femineæ, lineares, longiſſimæ.

Flores maſculi.

SQUAMÆ ovato-lanceolatæ, acuminatæ, e fuſco purpuraſcentes, concavæ, trinerves. *fig.* 1.

STAMINA: FILAMENTA tria, capillaria, demiſſo polline longitudine ſquamarum; ANTHERÆ lineares, quadriſulcatæ, flavæ. *fig.* 2. 3. 4.

Flores feminei.

SQUAMÆ ut in maſculo. *fig.* 5.

NECTARIUM inflatum, ovato oblongum, glabrum, collo contracto. *fig.* 6.

PISTILLUM: GERMEN triquetrum, intra Nectarium; STYLUS breviſſimus; STIGMATA tria, filiformia, pubeſcentia. *fig.* 7. 8.

SEMEN unicum, ovato acutum, triquetrum.

ROOT perennial, but not creeping.

STALK three feet high, in a rich ſoil growing even to the height of ſix feet, three cornered, ſmooth, at top ſtriated, leafy.

LEAVES half an inch broad, green without any glaucous appearance, ſomewhat rough from being finely ſawed, but much leſs ſo than many others of this genus.

SPIKES: all of them pendulous, the uppermoſt compoſed entirely of male flowers, thick, but ſlender at its baſe, the ſecond and third female, thick at top, with a mixture of male and female flowers, the lower ones female, linear, and very long.

Flowers of the male.

SCALES narrow-oval, running out to a long point, of a browniſh purple colour, hollow, with three ribs. *fig.* 1.

STAMINA: three FILAMENTS very fine, on the ſhedding of the pollen becoming as long as the ſcales; ANTHERÆ linear with four grooves, and of a yellow colour. *fig.* 2. 3. 4.

Flowers of the female.

SCALES as in the male. *fig.* 5.

NECTARY inflated, of an oval oblong ſhape, ſmooth, the neck contracted. *fig.* 6.

PISTILLUM: GERMEN three cornered, within the Nectary; STYLE very ſhort; STIGMATA three, thread-ſhaped, and downy. *fig.* 7. 8.

SEED ſingle, oval pointed, and three cornered.

We have here given for the firſt, a figure and deſcription of the *Carex pendula*, one of a numerous tribe of plants, diſtinguiſhed not leſs by the ſingularity of their fructification, than the difficulty which attends an inveſtigation of their ſeveral ſpecies, from this difficulty the preſent plant may however claim a total exemption, for in whatever ſituation it is found, its long, pendulous, female ſpikes at once diſtinguiſh it, theſe when young are very ſlender, as the ſeeds ripen they become much thicker and cylindrical.

This elegant ſpecies is found in great abundance in the moiſt hedges about *Hamſtead* and *Highgate*, flowering in May and ripening its ſeeds in June.

It is not applied ſo far as our knowledge at preſent extends to any particular purpoſes.

Carex pendula

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Ophrys ovata

Sansom Sculp

OPHRYS OVATA. TWAYBLADE.

OPHRYS *Lin. Gen. Pl.* GYNANDRIA DIANDRIA.

Nectarium ſubcarinatum.

Raii Syn. Gen. 29. HERBÆ RADICE BULBOSA PRÆDITÆ.

OPHRYS *ovata* bulbo fibroſo, caule bifolio, foliis ovatis, nectarii labio bifido. *Lin. Syſt. Vegetab.* p. 667. *Sp. Pl.* 1342. *Fl. Suec. n.* 808.

EPIPACTIS foliis binis ovatis, labello bifido. *Haller. hiſt.* 1291. t. 37.

OPHRYS ovata, *Bauhin. Pin.* 87. *Ger. emac.* 402.

BIFOLIUM ſylveſtre vulgare *Parkins.* 504. *Raii Syn.* 385. Common Twayblade.

Fl. Dan. t. 137. *Hudſon Fl. Angl. ed.* 2. p. 388. *Lightfoot Fl. Scot.* p. 523.

RADIX perennis, fibroſa, fibris plurimis, teretibus, cylindricis, contortis.

SCAPUS pedalis et ultra, ſolidus, teres, villoſus, ſubviſcidus, foliolis paucis perbrevibus, alternis, acuminatis, vaginantibus inſtructus.

FOLIA bina, prope terram, inferiore baſi ſua ſuperioris baſin ambiente, ovata, mucronata, quinquenervia.

FLORES herbacei, ſpicati, laxe et diſtincte inſidentes.

SPICA prælonga, anguſta.

Fig. 1. ad 12. exhibent partes fructificationis ſicut per lentem apparent.

Fig. 1. ad 6. Flos antice viſus.

Fig. 1. 4. 5. PETALA exteriora latiora, 2. 3. interiora anguſtiora.

Fig. 6. *Labellum* NECTARII bifidum, in ſitu naturali ſæpius inflexum.

Fig. 7. *Squama* ſuperior, *fig.* 10. *Squama* inferior, (ſuſtentaculum Halleri) inter quas theca ſtaminum quaſi in forcipe continetur.

Fig. 12. Theca ſtaminum, cum ſtaminibus incluſis.

Fig. 8. Theca ſtaminum, demiſſis ſtaminibus, *fig.* 9.

Fig. 15. STAMINA cum ANTHERIS bilamelloſis, flavis, ſeorſim exhibitis.

Fg. 11. Stigma.

Fig. 15. PERICARPIUM nat. magnitud.

ROOT perennial, fibrous, fibres numerous, round, cylindrical, matted together.

STALK a foot or more in height, ſolid, round, villous, ſlightly viſcid, and furniſhed with very ſhort, alternate, pointed ſheathing leaves.

LEAVES growing in pairs, near the ground, the lower one by its baſe ſurrounding the baſe of the upper one, ovate, pointed, with five ribs.

FLOWERS of a greeniſh colour, growing in a ſpike, ſitting looſely and diſtinctly.

SPIKE very long and narrow.

Fig. 1. to 12. exhibit the parts of the fructification as they appear through a magnifier.

Fig. 1. to 6. a flower ſeen in front.

Fig. 1. 4. 5. the outer broadeſt PETALS, 2. 3. the inner and more narrow ones.

Fig. 6. the *Lip* of the NECTARY, which in its natural ſituation is generally bent inward.

Fig. 7. the ſuperior *Squama*, *fig.* 10. the inferior *Squama* (the ſuſtentaculum of Haller) between which the caſe containing the ſtamina is held as in a pair of forceps.

Fig. 12. the Caſe of the ſtamina, with the ſtamina encloſed.

Fig. 8. the Caſe of the ſtamina, the ſtamina having fallen out, *fig.* 9.

Fig. 15. the STAMINA with the ANTHERÆ compoſed of two lamellæ of a yellow colour ſhewn by themſelves.

Fig 11. the Stigma.

Fig. 15. SEED-VESSEL of its natural ſize.

To render the characters of this genus, which are very difficult of inveſtigation, eaſy to the Botanic Student, they are repreſented in a magnified ſtate, and particularly referred to.

It will be ſeen on comparing, how very different they are from thoſe of the Orchis.

This ſpecies of Ophrys is the moſt common of the whole genus, and may be found in moſt of the woods about London, particularly ſuch as have a moiſt ſoil, as about Shooter's-hill, and ſometimes it is found in Meadows and on Heaths.

A variety with three leaves is now and then met with.

It flowers in May and June.

CENTUNCULUS MINIMUS. BASTARD PIMPERNEL.

CENTUNCULUS *Lin. Gen. Pl.* TETRANDRIA MONOGYNIA.

Cal. 4 fidus. *Cor.* 4. fida, patens. *Stam.* brevia. *Caps.* 1 locularis, circumſciſſa.

Raii Syn. Gen. 18. HERBÆ FRUCTU SICCO SINGULARI FLORE MONOPETALO.

CENTUNCULUS *minimus. Linnæi Syſt. Vegetab.* p. 133. *Spec. Plantar.* p. 169. *Flor. Suec. p.* 136.

CENTUNCULUS, *Haller. Hiſt.*

CENTUNCULUS, *Dillen. Catal. Giſs.* p. 161 et *App. p.* 111. *Tab.* 5.

ALSINE paluſtris minima, floſculis albis, fructu Coriandri exiguo. *Mentz. Pug. Icon.*

ANAGALLIS paluſtris. *Vaillant.* p. 12. *t.* 4. *f.* 2.

ANAGALLIDIASTRUM exiguum foliis lanceolatis alternis, flore albo fugaci et vix conſpicuo. *Micheli nov. gener.* p. 14. *t.* 18. *Hudſon. Fl. Angl. ed.* 2. p. 63.

RADIX annua, ſimplex, fibroſa.

CAULIS unguicularis ad pollicarem aut ultra, ſimplex ſeu ad baſin ramoſus, ſuberectus, teres, glaber.

FOLIA alterna, ſeſſilia, ovata, acuta, integerrima, glabra, ſubcarnoſa, patentia.

FLORES minimi, ſolitarii, axillares, ſeſſiles.

CALYX: PERIANTHIUM quadripartitum, patens, perſiſtens, laciniis ovato-lanceolatis, margine fuſcis, corolla longioribus. *fig.* 1.

COROLLA monopetala, purpuraſcens, ſubrotata; TUBUS globoſus; LIMBUS quadripartitus, erectus, laciniis ovato-acutis; demum clauſis, et calyptræ inſtar capſulâ inſidentibus. *fig.* 2.

STAMINA: FILAMENTA quatuor, corollâ breviora; ANTHERÆ minimæ, flavæ. *fig.* 3.

PISTILLUM: GERMEN ſubrotundum, intra tubum corollæ; STYLUS filiformis, longitudine germinis et corollæ, erectus, perſiſtens; STIGMA ſimplex. *fig.* 4.

PERICARPIUM: CAPSULA globoſa, unilocularis, circumſciſſa. *fig.* 5.

SEMINA plurima, minima, ſubconica. *fig.* 6.

ROOT annual, ſimple and fibrous.

STALK from half an inch to an inch in height or more, ſimple or branched at bottom, ſomewhat upright, round, and ſmooth.

LEAVES alternate, ſeſſile, ovate, pointed, entire at the edge, ſmooth, ſomewhat fleſhy and ſpreading.

FLOWERS very minute, ſingle, in the alæ of the leaves, without footſtalks.

CALYX a PERIANTHIUM divided deeply into four ſegments, ſpreading, and permanent; the ſegments ovato-lanceolate, brown on the edge, and longer than the corolla. *fig.* 1.

COROLLA purpliſh, monopetalous, ſomewhat wheel-ſhaped; TUBE globular; LIMB divided into four ſegments, which are upright, and of a pointed oval ſhape, finally cloſed and fitting like a calyptra on the top of the capſule. *fig.* 2.

STAMINA: four FILAMENTS ſhorter than the corolla; ANTHERÆ very minute and yellow. *fig.* 3.

PISTILLUM: GERMEN roundiſh, within the tube of the corolla; STYLE filiform, the length of the germen and corolla, upright and permanent; STIGMA ſimple. *fig.* 4.

SEED-VESSEL: a CAPSULE of a globular ſhape, of one cavity, dividing horizontally in the middle. *fig.* 5.

SEEDS numerous, very ſmall and ſomewhat conical. *fig.* 6.

The Engliſh Botaniſt is here preſented with a plant remarkable for the minuteneſs of all its parts, but more eſpecially of its bloſſoms, which are not expanded ſo as to ſhew the interior ſtructure of the flower, unleſs the ſun ſhines ſtrongly on them, then we diſcern its yellow ſtamina; DILLENIUS, who firſt gave to this plant the name of *Centunculus* and made a new genus of it, remarks a circumſtance deſerving notice, which is that the Corolla, which in moſt of the *rotaceæ* (wheel-ſhaped flowers) drops after bloſſoming, here continues, and covers the top of the capſule.

From the ſmall number of places in which this plant has been deſcribed to grow, we have been led to conſider it as a much ſcarcer plant than it really is.

The firſt time of my diſcovering the *Centunculus minimus* was this ſummer, when herbarizing in company with Mr. DYER; I found it on *Aſhford Common* near his country ſeat, it there grew in tolerable plenty, in moiſt depreſſed ſituations, uſually overflown in the winter along with the *Littorella lacuſtris*, paſſing from *Aſhford* to *Hounſlow Heath*, I there found it in ſimilar ſituations in greater plenty, *Spergula nodoſa* in bloom, *Veronica Serpyllifolia* and *Sagina procumbens* growing in abundance near it; this was about the middle of July, when the plant had both flowers and capſules on it, and Auguſt the 21ſt plants from the ſame place removed into my garden and placed in a pot in a ſhady ſituation, were in great perfection, ſo that the Centunculus is not ſo fugacious a plant as many.

It generally grows about the ſize figured in the plate, but may, according to circumſtances, be found much larger, as well as much ſmaller.

Its round capſules in the alæ of the leaves, like ſmall Coriander ſeeds, contribute moſt to the diſcovering of it.

Centunculus minimus.

Rumex acutus.

RUMEX ACUTUS. SHARP-POINTED DOCK.

RUMEX *Lin. Gen.* HEXANDRIA TRIGYNIA.

Cal. 3 phyllus. *Petala* 3 conniventia. Semen triquetrum.

Raii Syn. Gen. 5. HERBÆ FLORE IMPERFECTO SEU STAMINEO VEL APETALO POTIUS.

RUMEX *acutus* floribus hermaphroditis; valvulis dentatis graniferis, foliis cordato oblongis acuminatis. *Lin. Syſt. Veg.* p. 285. *Sp. Pl.* p. 478. *Fl. Suecic.* n. 316.

LAPATHUM petiolo lateſcente, foliis lanceolatis, calyce ſerrato. *Haller. hiſt.* n. 1591.

LAPATHUM acutum. *Scopoli* p. 292.

LAPATHUM folio acuto plano. *B. pin.* 115.

LAPATHUM acutum. *Ger. emac.* 388.

LAPATHUM acutum ſeu Oxylapathum. *J. Bauh.* II. 983.

LAPATHUM acutum majus. *Park.* 1224. *Raii Syn.* p. 142. Sharp-pointed Dock.

Hudſon. Fl. Angl. ed. 2. p. 155. *Lightfoot Fl. Scot.* p. 188.

RADIX perennis, craſſitie digiti minimi aut major, in terram profunde penetrans nec facile extrahenda, ſimplex in junioribus, in adultis ramoſa, foris e flavo fuſca, cortice interne flaveſcente, medulla albida.

CAULIS bipedalis, ad tripedalem, craſſitie pennæ anſerinæ, teres, ſtriatus, rubens, ramoſus, ſuperne flexuoſus, rigidus, geniculis ſtipulis obſoletis tectis.

RAMI cauli ſimiles, patentes, longiuſculi, inferne folioſi.

FOLIA inferiora oblongo-ovata, acuta, baſi ſubcordata, plana, longitudine uncias quinque, latitudine duas, margine crenulato-criſpa, ſubtus fibris plurimis minute reticulata, caulina ſæpius undulata, attamen multo minus quam in rumice criſpo.

FLORES parvi, numeroſi, circa ramulos ſemiverticillatim diſpoſiti, idque alterne, penduli.

PEDUNCULI filiformes, ad baſin geniculati.

CALYX: PERIANTHIUM triphyllum, foliolis minimis, ſubſetaceis, concavis, rigidulis, perſiſtentibus.

COROLLA *Stamina* et *Piſtillum*, cum nullam notam præbeant huic ſpeciei peculiarem, ad valvulas ſemen maturam continentes præterimus, ob quibus certe et facile diſtinguitur.

VALVULÆ minimæ ſi ad valvulas aliorum Rumicum noſtratium comparantur, calyce duplo longiores, oblongæ, obtuſiuſculæ, integerrimæ, unicâ idque exteriore ſemper granifera, reliquis plerumque nudis, ex apice granulæ per medium valvulæ decurrit linea prominula et utrinque venæ aliquot ope lentis ſolummodo diſtingui poſſint; *Granulæ* primum oblongæ, demum rotundæ, prominulæ, in umbroſis pallidæ, in apricis ruberrimæ.

SEMEN unicum, triquetrum, flaveſcens.

Fig. 1 Calyx. 2 Corolla. 3 Stamina. 4 Piſtillum. 5 Valvulæ cum granulis immaturis. 6 Semen.

ROOT perennial, the thickneſs of the little finger, or larger, penetrating deeply into the earth, and not eaſily drawn out, in the young ones ſimple, in the full-grown ones branched, externally of a yellowiſh brown colour, the inſide of the bark yellowiſh, the pith whitiſh.

STALK from two to three feet high, the thickneſs of a gooſe quill, round, ſtriated, reddiſh, branched, on the upper part crooked, rigid, the joints covered with obſolete ſtipulæ.

BRANCHES like the ſtalk, ſpreading, longiſh, on the lower part leafy

LEAVES at the bottom of the ſtalk of an oblong, oval ſhape, pointed, at the baſe ſomewhat heart-ſhaped, flat, about five inches in length and two in breadth, the edge notched, and ſomewhat curled, underneath finely reticulated with numerous fibres, thoſe on the ſtalk uſually waved, but much leſs ſo than in the curled dock.

FLOWERS ſmall, numerous, diſpoſed about the branches in half whirls, and that alternately, hanging down.

FLOWER-STALKS filiform, with a joint at the baſe.

CALYX: a PERIANTHIUM compoſed of three leaves, which are very ſmall, narrow, pointed, hollow, ſomewhat rigid and permanent.

COROLLA *Stamina* and *Piſtillum* having nothing in them very peculiar, we paſs on to the valves containing the ripe ſeed, which afford the principal marks characterizing this ſpecies.

VALVES very ſmall if compared with the valves of our other Docks, twice the length of the calyx, oblong, bluntiſh, entire at the edge, one and that the outer one always bearing a granule, the others generally naked, from the top of the granule through the middle of the valve runs a prominent line, on each ſide of which, by the help of a glaſs only, may be diſcerned a few veins; *Granules* at firſt oblong, finally becoming round and prominent, in the ſhade pallid, in expoſed ſituations very red.

SEED ſingle, three-cornered, and yellowiſh.

Fig. 1 The Calyx. 2 the Corolla. 3 the Stamina. 4 the Piſtillum. 5 the Valves with the granules unripe. 6 the Seed.

The *Rumex acutus*, like the *Rumex maritimus*, is a plant by no means well underſtood, either by Botaniſts or Simplers, both of which in their turn miſtake it for ſome other ſpecies; this I ſhould not aſſert, had I not ſeen frequent inſtances of ſuch miſtakes: fortunately it has a character which need only to be pointed out to make this ſpecies as obvious as any plant in nature, and this is the ſmallneſs of its ſeed-valves, which are uniformly at leaſt thrice as ſmall as thoſe of any of our other Docks; the ſpecies to which the *Rumex acutus* at firſt ſight has the greateſt reſemblance, are the *criſpus*, the *pulcher*, and the *maritimus*, the firſt of theſe is characterized by having its leaves very much curled, its ſeed valves almoſt round, entire and very large, ſo that they nearly hide the branches, in this the leaves are much leſs curled, the ſeed-valves, although entire at the edge, are altogether as ſmall as in the criſpus they are large, and inſtead of being roundiſh are of an oblong ſhape, the whole plant is more fine and delicate and the branches more ſpreading; from the *pulcher* and *maritimus* it is at once diſtinguiſhed, by having the edges of its valves entire, which in thoſe are toothed.

The Sharp-pointed Dock is not confined to any particular place of growth, it is found not only in woods, hedge-rows, and hedges, but alſo by the ſides of rivers and roads; in fields and meadows it is leſs frequent; Camberwell Grove is at preſent a good Habitat for it; it flowers in June and July. The *Rumex ſanguineus* differs in no reſpect from the preſent plant, but in the colour of its veins, on this account I conſider it merely as its variety.

It is the more neceſſary that the Dock here figured ſhould be thus pointed out, as it is an officinal plant, and conſidered as uſefull in the cure of ſcorbutic and cutaneous diſorders, both exhibited internally, and applied externally in ointments, cataplaſms, and fomentations.

HYPERICUM HIRSUTUM. HAIRY ST. JOHN's WORT.

HYPERICUM *Lin. Gen. Pl.* POLYADELPHIA POLYANDRIA.
Cal. 5, partitus, *Petala* 5, *Filamenta* multa, in 5 phalanges baſi connata. *Capſula.*

Raii Syn. HERBÆ PENTAPETALÆ VASCULIFERÆ.

HYPERICUM *hirſutum* floribus trigynis, calycibus ſerrato-glanduloſis, caule tereti erecto, foliis ovatis ſubpubeſcentibus. *Lin. Syſt. Vegetab. Sp. Pl.* 1105. *Fl. Suec.* n. 682.

HYPERICUM foliis ovatis, per oram punctatis, calycibus lanceolatis, ſerratis, globuligeris, *Haller. hiſt.* n. 1042.

HYPERICUM *hirſutum Scopoli Fl. Carniol.* p. 92. n. 945.

ANDROSÆMUM *hirſutum, Bauhin. pin.* 280.

HYPERICUM Androſæmum dictum. *Bauh. hiſt.* III. 382.

ANDROSÆMUM alterum hirſutum. *Col. ecphr.* 1. p. 75. t. 74.

ANDROSÆMUM Aſcyron dictum, caule rotundo hirſuto. *Moris. hiſt.* 2. p. 971. ſ. 5. t. 6. f. 11.

HYPERICUM villoſum erectum, caule rotundo. *Tournefort. Inſt.* 255. *Raii Syn.* Tutſan St. John's Wort.

Hudſon Fl. Angl. ed. 2. p. 333. *Lightfoot Fl. Scot.* p. 419.

RADIX perennis, fibroſa, fibris fuſcis, rigidis, ſublignoſis.	ROOT perennial, fibrous, the fibres brown, rigid, and ſomewhat woody.
CAULIS ſeſquipedalis, ad tripedalem, erectus, ſolidus, rubicundus, teres, pubeſcens, plerumque ſimplex, ramoſus etiam occurrit, rarius vero quam in hyperico perforato.	STALK a foot and a half to three feet high, upright, ſolid, reddiſh, round, hairy, or downy, generally ſimple, but ſometimes branched, though much leſs ſo than the common Saint John's Wort.
FOLIA alterne oppoſita, oblonga, obtuſa, ſeſſilia, utrinque villoſula, margine minutim ciliata, ſeptemnervia, punctis diaphanis minutiſſimis per totam ſuperficiem adſperſa.	LEAVES alternately oppoſite, oblong, obtuſe, ſeſſile, hoary on each ſide, the edge finely ciliated, marked with ſeven ribs, and very minute tranſparent dots ſpread all over its ſurface.
RAMI: rudimenta rami conſtantes foliolis quatuor decuſſatis in axillis foliorum ſæpius obſervantur, hæc vero aliquando omnino deſunt, et nonnunquam in ramos producuntur.	BRANCHES: rudiments of branches conſiſting of four leaves forming a croſs are generally obſerved in the alæ of the leaves, theſe however are ſometimes wanting, and ſometimes are drawn out into branches.
FLORES flavi, terminales, in panicula, oblonga, ſubſpicata.	FLOWERS yellow, terminal, in an oblong panicle forming a kind of ſpike.
CALYX: PERIANTHIUM quinquepartitum; laciniis lanceolatis, biſulcis, margine glanduloſis, foliola etiam et gemmæ calyci ſubjecta glandulis nigris pedicellatis ornantur. *fig.* 1.	CALYX: a PERIANTHIUM divided into five ſegments; which are lanceolate, with two grooves, and glandular on the edge, the ſmall leaves and buds below the calyx are alſo ornamented with black glands placed on footſtalks. *fig.* 1.
COROLLA: PETALA quinque, flava, oblongo-ovata, obtuſa, patentia, ſtriata. *fig.* 2.	COROLLA: five PETALS of a yellow colour and oblong oval ſhape, blunt, ſpreading and ſtriated. *fig.* 2.
STAMINA: FILAMENTA viginti, ad triginta, in tres phalanges obſcure diviſa, capillaria, recta, flava, corolla breviora; ANTHERÆ ſubrotundæ, didymæ, flavæ. *fig.* 3.	STAMINA: from twenty to thirty FILAMENTS obſcurely divided into three bundles or faſciculi, very fine, ſtrait, yellow and ſhorter than the Corolla; Antheræ roundiſh, double, yellow. *fig.* 3.
PISTILLUM: GERMEN ſubrotundum. STYLI tres, ſimplices, diſtantes, longitudine ſtaminum; STIGMATA ſimplicia. *fig.* 4.	PISTILLUM: GERMEN roundiſh: STYLES three, ſimple, ſpreading, the length of the ſtamina. STIGMATA ſimple. *fig.* 4.
PERICARPIUM: *Capſula* oblonga, trilocularis, trivalvis. *fig.* 5. 6.	SEED-VESSEL an oblong capſule of three cavities and three valves. *fig.* 5. 6.
SEMINA plurima, minima. *fig.* 7.	SEEDS numerous and very minute. *fig.* 7.

The more antient Botaniſts paying but little regard to the nicety of diſtinction, overlooked this ſpecies of *Hypericum*; COLUMNA poſſeſſing greater diſcernment than his predeceſſors appears firſt to have figured and deſcribed it; by ſuperficial obſervers it may eaſily be miſtaken for the common St. John's Wort, but differs from it in being a taller plant, having a ſtalk perfectly round and hoary, and the edges of the calyx beſet with black glands, it is alſo more apt to grow in woods and coppices, though it is frequently met with in hedges.

It flowers in July and Auguſt.

It grows plentifully in a field juſt beyond Dulwich College, alſo about the Oak of Honour Wood near Peckham, and moſt of the Woods near Town.

Hypericum hirsutum.

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Stachys sylvatica.

STACHYS SYLVATICA. HEDGE NETTLE.

STACHYS *Lin. Gen. Pl.* DIDYNAMIA GYMNOSPERMIA.

Corollæ lab. ſuper. fornicatum, lab. inferius lateribus reflexum, intermedia majore emarginata, *Stamina* deflorata verſus latera reflexa.

Raii Syn. Gen. 24. SUFFRUCTICES ET HERBÆ VERTICILLATÆ.

STACHYS *ſylvatica* verticillis ſexfloris, foliis cordatis petiolatis. *Lin. Syſt. Veg.* p. 447. *Sp. Pl.* 811. *Fl. Suecic.* n. 526.

CARDIACA foliis cordatis ſerratis, verticillis nudis, ſpicatis. *Haller. hiſt.* n. 216.

STACHYS *ſylvatica. Scopoli Fl. Carniol.* n. 706.

LAMIUM maximum ſylvaticum fœtidum. *Bauh. pin.* 231.

GALEOPSIS vera. *Ger. emac.* 709.

GALEOPSIS legitima Dioſcoridis. *Park.* 608. *Raii Syn. ed.* p. 343. Hedge-Nettle.

GALEOPSIS ſive urtica iners magna fœtidiſſima. *J. B.* III. 853.

Hudſon Fl. Angl. ed. 2. p. 259. *Lightfoot Fl. Scot.* p. 312.

RADIX perennis, repens.

CAULIS erectus, pedalis ad tripedalem, quadrangularis, hirſutus, ramoſus.

RAMI oppoſiti, ſuberecti, cauli ſimiles.

FOLIA petiolata, cordata, acuta, ſerrata, venoſa, utrinque hirſuta.

PETIOLI hirſuti, longitudine foliorum.

FLORES ſaturate at vivide purpurei, verticillati, laxe ſpicati, verticillis ſexfloris, brevibus pedicellis inſidentibus; ad ſingulum geniculum ſetæ duodecim, utrinque ſex, floribus ſubjectæ.

CALYX: PERIANTHIUM monophyllum, campanulatum, hirſutum, viſcidum, punctis prominulis ſcabrum, purpuraſcens, quinquedentatum, dentibus acutis, patentibus, ſupremo paulo longiore. *fig.* 1.

COROLLA monopetala, ringens, purpurea, tubus breviſſimus, albus, fauce tenuior, apice ſtrangulatus, et interne villoſus; *Faux* nitida, ſubcylindracea, paululum incurvata, ſuperne villis minimis adſperſa; *Labium* ſuperius ovatum, obtuſum, integerrimum, inferne concavum, ſuperne convexum, viſcidulum, *Labium* inferius majus, trifidum; albo pulchre variegatum, lacinulâ intermedia ſubemarginata, replicata. *fig.* 2. 3. 4.

STAMINA: FILAMENTA quatuor, quorum duo paulo longiora, purpurea, nitida, medio paululum incraſſata, et piloſa; ANTHERÆ primum obſcure violaceæ, demum nigricantes; POLLEN album. *fig.* 5.

PISTILLUM: GERMEN quadripartitum; STYLUS filiformis; ſitu et longitudine ſtaminum; STIGMA bifidum, acutum. *fig.* 6. 7. 8.

NECTARIUM: *Glandula* majuſcula, totam baſin germinis cingens. *fig.* 9.

PERICARPIUM nullum; Calyx continens

SEMINA quatuor, ovata, angulata. *fig.* 10.

ROOT perennial, and creeping.

STALK upright, from one to three feet high, ſquare, hirſute and branched.

BRANCHES oppoſite, nearly like the ſtalk.

LEAVES ſtanding on footſtalks, heart-ſhaped, pointed, ſerrated, veiny, hirſute on both ſides.

LEAF-STALKS hirſute, the length of the leaves.

FLOWERS of a deep but bright colour, growing in whirls and forming a looſe ſpike, about ſix flowers in each whirl, ſitting on ſhort flower-ſtalks, at each joint, twelve ſetæ or fine pointed leaves, ſix on each ſide, placed under the flowers.

CALYX: a PERIANTHIUM of one leaf, bell-ſhaped, hirſute, viſcid, rough with little prominent points, of a purpliſh colour, having five pointed ſpreading teeth, of which the uppermoſt is ſomewhat the longeſt. *fig.* 1.

COROLLA monopetalous, ringent, purple, the tube very ſhort, white, ſlenderer than the faux, ſtrangled at top where it is villous on the inſide; *Faux* ſhining, ſomewhat cylindrical, bending a little down, on the upper part covered with numerous ſhort hairs; the upper *Lip* ovate, obtuſe, entire, below concave, above convex, and ſomewhat viſcid, the lower *Lip* large, trifid, beautifully variegated with white, the middle ſegment ſlightly notched, and having its ſides folded back. *fig.* 2. 3. 4.

STAMINA: four FILAMENTS, two of which are a little longer than the others, purple, ſhining, thickened a little in the middle and hairy; ANTHERÆ at firſt of a dull violet colour, finally blackiſh; POLLEN white. *fig* 5.

PISTILLUM: GERMEN divided into four parts; STYLE thread-ſhaped, ſituated with and of the ſame length as the ſtamina; STIGMA bifid, and pointed. *fig.* 6. 7. 8.

NECTARY: a largiſh *Gland* ſurrounding the whole baſe of the germen. *fig.* 9.

SEED-VESSEL none, the Calyx containing.

SEEDS; four ovate and angular. *fig.* 10.

In the parts of fructification, there is a conſiderable ſimilarity betwixt this ſpecies and the paluſtris, but in the form of its leaves it differs very materially.

It grows in almoſt every ſhady ditch about London and elſewhere, and flowers in June and July, its bloſsoms have ſufficient beauty to recommend them, and they might perhaps be more an object of admiration, did not the plant, on being in the leaſt bruiſed, ſmell diſagreeably, if not bruiſed, its ſcent is rather of the agreeable kind.

The Snail, excepted few animals, appear to reliſh it.

CHENOPODIUM BONUS HENRICUS. GOOD KING HENRY.

CHENOPODIUM. *Lin. Gen. Pl.* PENTANDRIA DIGYNIA.

Cal. 5 phyllus, 5 gonus, *Cor.* 0. *Sem.* 1. lenticulare, ſuperum.

Raii Syn. Gen. 5. HERBÆ FLORE IMPERFECTO SEU STAMINEO VEL APETALO POTIUS.

CHENOPODIUM *Bonus Henricus* foliis triangulari ſagittatis integerrimis, ſpicis compoſitis aphyllis axillaribus. *Lin. Syſt. Vegetab. p.* 216. *Sp. Pl. p.* 318. *Fl. Suecic. n.* 214.

CHENOPODIUM foliis triangularibus, undulatis, integerrimis, ſubtus farinoſis. *Haller. hiſt. n.* 1578.

CHENOPODIUM *Bonus Henricus. Scopoli. Fl. Carn.* 278.

LAPATHUM unctuoſum folio triangulo. *Bauh. Pin.* 115.

BLITUM perenne. *Bonus Henricus* dictum. Bonus Henricus *J. B.* II. 965. *Ger. emac.* 329.

LAPATHUM unctuoſum. *Park.* 1225. *Raii Syn.* p. 156. Common Engliſh Mercury, or All-good. *Hudſon Fl. Angl. ed.* 2. *p.* 104. *Lightfoot Fl. Scot. p.* 147.

RADIX perennis, ramoſa.	ROOT perennial and branched.
CAULIS pedalis, ad ſeſquipedalem, erectus, ad baſin teres, lævis, ſuperne ſtriato-angulatus, farinâ diaphanâ adſperſus, ramoſus.	STALK from a foot to a foot and a half in height, at bottom round and ſmooth, upwards finely grooved, and ſomewhat angular, covered with tranſparent powdery globules, and branched.
FOLIA petiolata, alterna, ſagittato-triangularia, lævia, ſubtus venoſa, pallidiora, et farinoſa, ſubundulata, integerrima.	LEAVES ſtanding on footſtalks, alternate, triangularly arrow-ſhaped, ſmooth, underneath veiny, of a paler colour and mealy, ſomewhat waved, and entire at the edge.
SPICA florum terminalis, luteſcens, conica, nuda, pulverulenta, inferne compoſita, ſuperne glomerata, cylindrica.	SPIKE of flowers terminal, yellowiſh, conical, naked, mealy, below branched, above cluſtered and cylindrical.
CALYX: PERIANTHIUM monophyllum, quinquepartitum, laciniis ſubcuneiformibus, concavis, margine membranaceis, apice dentato eroſis, *fig.* 1.	CALYX: a PERIANTHIUM of one leaf, deeply divided into five ſegments, which are ſomewhat wedge-ſhaped, concave, membranous at the edge, and jagged at top, *fig.* 1.
COROLLA nulla.	COROLLA wanting.
STAMINA: FILAMENTA quinque, ſubulata, calyce paulo longiora; ANTHERÆ ſubrotundæ, didymæ, flavæ, *fig.* 2.	STAMINA: five FILAMENTS tapering, a little longer than the calyx; ANTHERÆ roundiſh, double, and yellow, *fig.* 2.
PISTILLUM: GERMEN ovatum, compreſſum; STYLUS nullus; STIGMA bipartitum, tripartitum, aut etiam quadripartitum, laciniis acuminatis, albidis, patentibus, *fig.* 4.	PISTILLUM: GERMEN ovate, flattened; STYLE wanting; STIGMA divided to the baſe into two, three, or four ſegments, which run out to a point, are of a whitiſh colour, and ſpreading, *fig.* 4.
PERICARPIUM nullum, calyx continens *ſemen* unicum, majuſculum, ſubreniforme, compreſſum, calycem excedens, epidermide tenui obtectum, *fig.* 5.	SEED-VESSEL wanting, the calyx containing a ſingle ſeed, large, ſomewhat kidney-ſhaped, flattened, exceeding the calyx, and covered with a fine ſkin, *fig.* 5.
FLORES FEMINEI, plurimi, intra hermaphroditos.	FEMALE FLOWERS numerous among the hermaphrodite ones.

Several plants of the Orach and Gooſefoot kind are gathered while young and tender by the poorer ſort of people to ſupply the place of Spinach and other greens, one of them is the preſent plant, whoſe excellence as a pot-herb ſeems not to be ſo generally known as it deſerves; at *Boſton* in *Lincolnſhire*, and probably in many other places in the kingdom, they are ſenſible of its value, it is there univerſally cultivated, every one poſſeſſing the leaſt ſpot of ground has his plantation of *Engliſh* Mercury; by them it is conſidered as ſuperior to Spinach, and always preferred to it, yet, ſtrange to tell! this uſeful herb is unknown to the greateſt Herb-market in the world, *Covent-Garden*.

To produce this deſirable plant in its greateſt perfection, ſow the ſeed about March on a deep loomy ſoil prepared as for Aſparagus, let the ſeedlings continue to grow till Autumn, about the middle of September, taking advantage of a wet ſeaſon, ſet them out on a bed ſimilar to that on which they were ſown, about a foot apart, keep them clear of weeds, and the enſuing Spring and Summer the plant will afford an abundant crop, the young ſhoots with their leaves and tops are to be cut as they ſpring up, and being a perennial plant it will continue thus plentifully to produce for a great number of years; in the winter the bed is to be covered with dung, which ſhould be raked off as the Spring advances, when the earth around the roots is carefully to be dug or forked up.

As a medicine this herb is ranked among the emollients, but rarely made uſe of in practice; the leaves are applied by the common people for healing ſlight wounds, cleanſing old ulcers, and other like purpoſes.

It grows in uncultivated places, by road-ſides, and particularly in the environs of Farm-yards, like moſt of the ſame genus appearing to be fond of dung; it produces both flowers and ſeeds from May to Auguſt.

From all the other Chenopodiums it differs in having a perennial root.

The name by which it is moſt commonly called is that of *Mercury*, a name which tends to confound it with the other Mercuries (*Mercurialis annua*, and *perennis*) and which it were better if poſſible to get rid of by uſing the old botanic name of *Good King Henry*.

Chenopodium Bonus Henricus.

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Lythrum Salicaria.

LYTHRUM SALICARIA. PURPLE-SPIKED LOOSE-STRIFE.

LYTHRUM *Lin. Gen. Pl.* DODECANDRIA MONOGYNIA.

Cal. 12 fidus. *Petala* 6. calyci inſerta. *Capſ.* 2. locularis, polyſperma.

Raii. Syn. Gen. 25. HERBÆ HEXAPETALÆ ET POLYPETALÆ VASCULIFERÆ.

LYTHRUM *Salicaria* foliis oppoſitis cordato lanceolatis floribus ſpicatis dodecandris. *Lin. Syſt. Vegetab. p.* 371. *Spec. plant.* 640. *Fl. Suec. n.* 422.

SALICARIA foliis lanceolatis, ſubhirſutis, floribus ſpicatis. *Haller. hiſt.* 854.

LYTHRUM *Salicaria. Scopoli Fl. Carn. n.* 565. *Lyſimachia* ſpicata purpurea. *Bauh. Pin.* 246.

SALICARIA vulgaris purpurea foliis oblongis. *Tourn. Inſt. Raii Syn.* p. 367. Purple ſpiked Willow-herb, or Looſe-ſtrife.

LYSIMACHIA purpurea *Ger. emac.* 476. *Parkinſon* 546. *Hudſon. Fl. Angl. ed.* 2. *p.* 206. *Lightfoot, Fl. Scot. p.* 206.

RADIX perennis, craſſa, ramoſa, ſublignoſa, in latum extenſa.	ROOT perennial, thick, branched, ſomewhat woody, widely extended.
CAULIS bipedalis ad tripedalem, erectus, inferne glaber, tetragonus, ſuperne pubeſcens, pentagonus: angulis acutis, membranaceis, ſcabris, ramoſus.	STALK from two to three feet high, upright, below ſmooth, four-cornered; angles ſharp, membranous and rough; branched.
RAMI ſuperiores ſparſi; inferiores oppoſiti, tetragoni, ſcabri, minutim pubeſcentes, erecti, breviuſculi, frequentes.	BRANCHES: the upper ones placed without any order; the lower ones oppoſite, four-cornered, rough, and ſlightly downy, upright, ſhortiſh, and numerous.
FOLIA ſeſſilia, amplexicaulia, lanceolata, acuta, tripollicaria, ſupra glabra, ſubtus minutim pubeſcentia, ſcabriuſcula, venoſa, margine ſcabra, patentia; inferiora oppoſita, ſuperiora ſparſa, ramea oppoſita.	LEAVES ſeſſile, embracing the ſtalk, lanceolate, pointed; about three inches long, above ſmooth, underneath ſlightly downy, roughiſh, and veiny, ſpreading; the lower ones oppoſite, the upper ones placed without any regular order, thoſe of the branches oppoſite.
SPICÆ terminales, cylindricæ, e glomeribus florum compoſitæ, glomeribus remotiuſculis, circiter octofloris, bracteâ fulcitis.	SPIKES terminal, cylindrical, compoſed of cluſters of flowers, which are placed at a little diſtance from each other, and conſiſt of about eight flowers, ſupported by a floral leaf.
BRACTEÆ *glomerum* ſolitariæ, ovatæ, longius acutæ, ſubtus villoſæ, calycibus longiores, ſubpurpureæ; florum lineari-ſubulatæ, parviuſculæ.	FLORAL-LEAVES of the *cluſters* ſolitary, oval with a long point, underneath villous, longer than the flower-cups, and purpliſh, thoſe of the flowers ſmall, nearly linear, and running out to a point.
CALYX: PERIANTHIUM tubulatum, turbinato-cylindricum, ſtriatum, hirſutum: ore truncato, 12 fido: laciniis purpuraſcentibus: quarum ſex alternæ, ſubulatæ, hirſutæ, erectæ, ſex aliæ alternæ parvæ, ovato acutiuſculæ, inflexæ, concavæ, apice minutim barbatæ, *fig.* 1.	CALYX: a PERIANTHIUM tubular, cylindrical but wideſt at top, ſtriated, hirſute, the mouth as if cut off, divided into twelve purpliſh ſegments, ſix of which run out to a long point, are hirſute and upright, the other ſix which are alternate with the preceding ſix are ſmall, ovate, pointed, bend inward over the ſtump, are hollow and minutely bearded at top, *fig.* 1.
COROLLA purpurea: PETALA 6, cuneiformi-oblonga, obtuſo rotundata, erecta, calyce longiora, margine calycis intra lacinias calycis longiores inſerta, patentia. Petala ante eruptionem calycis tubo intruſa ſunt et recondita; hinc poſtmodum erumpunt et quaſi e calyce extrahuntur, *fig.* 2.	COROLLA purple. PETALS 6, of an oblong wedge ſhape, blunt at the extremity, upright and longer than the calyx, inſerted into the edge of the calyx betwixt its longeſt ſegments, and ſpreading; the Petals, before they break out, are as it were thruſt into and hid in the tube of the calyx, from whence they afterwards burſt forth, and are as it were drawn out of the calyx, *fig.* 2.
STAMINA: Filamenta 12, ſubulata, albida, calycis parieti intra tubum inſerta, quorum ſex longiora tubo calycis paulo longiora; 6 breviora intra tubum recondita; *Antheræ* inferiores ovatæ, luteæ, incumbentes, ſuperiores purpureæ, *fig.* 3.	STAMINA: 12 Filaments, tapering and whitiſh, inſerted into the inſide of the calyx, of which the ſix longeſt are ſomewhat longer than the tube of the calyx, and the ſix ſhorteſt hid within the tube; ANTHERÆ ovate and incumbent, the lowermoſt yellow, the uppermoſt purple, *fig.* 3.
PISTILLUM: GERMEN ſuperum, ovatum, acutum, utrinque ſulcatum, glabrum, virideſcens; STYLUS cylindricus, albus, corollâ vix longior; STIGMA capitatum, *fig.* 4.	PISTILLUM: GERMEN above the calyx, ovate, pointed, with a groove on each ſide, ſmooth, greeniſh; STYLE cylindrical, white, ſcarce longer than the Corolla; STIGMA forming a little head.
PERICARPIUM: CAPSULA oblonga, tecta, bilocularis, *fig.* 5, 6.	SEED-VESSEL: an oblong Capſule, covered by the calyx, of two cavities, *fig.* 5, 6.
SEMINA plurima, minima, *fig.* 7.	SEEDS numerous and very ſmall, *fig.* 7.

The beautiful long ſpikes of purple flowers which this plant plentifully produces during the latter part of the Summer, render it a conſpicuous ornament on the banks of rivers, ponds, ditches, &c. where it grows almoſt univerſally in this country; brought into the garden it flouriſhes without any trouble, and is a very proper plant to grace the ſhrubbery.

Its qualities appear to be of the aſtringent kind, hence it has been recommended by DE HAEN in long protracted Diarrhœas and Dyſenteries. *Vid. rat. med. part.* 4. *p.* 195.

It generally remains untouched by cattle; I have this year obſerved its leaves very much eaten by the Caterpillar of a *Tenthedo.*

The ſtructure of the bloſſom is ſingularly curious, and will amply repay the botaniſt the trouble of diſſecting it.

I have noticed a variety with three leaves at a joint, in which the ſtalk was hexagonal.

Scabioſa ſucciſa. Devils-bit, or Meadow Scabious.

SCABIOSA *Lin. Gen. Pl.* TETRANDRIA MONOGYNIA

Cal. communis polyphyllus; *proprius* duplex ſuperus. *Recept.* paleaceum ſ. nudum.

Raii. Syn. Gen. 8. HERBÆ CORYMBIFERIS AFFINES.

SCABIOSA *Succiſa* corollulis quadrifidis æqualibus, foliis caulinis dentatis, floribus ſubgloboſis.

SCABIOSA *ſucciſa* corollulis quadrifidis æqualibus, caule ſimplici, ramis approximatis, foliis lanceolato-ovatis integerrimis. *Lin. Syſt. Vegetab. p.* 142.

SCABIOSA caule trifloro, floribus convexis, foliis radicalibus ovatis, caulinis lanceolatis. *Haller. Hiſt.* 201.

SCABIOSA *ſucciſa Scopoli Fl. Carniol p.* 95. *n.* 138.

SUCCISA glabra et hirſuta *B. pin.* 269.

MORSUS DIABOLI *Ger. em.* 726.

MORSUS DIABOLI vulgaris flore purpureo *Parkins.* 491.

SCABIOSA radice ſucciſa, flore globoſo. *Raii. Syn.* 191. Devil's-bit.

Hudſon. Fl. Angl. ed. 2. *p.* 63.
Lightfoot. Fl. Scot. p. 114.

RADIX adulta craſſitie fere digiti minimi, ſæpe obliqua, præmorſa, fibris longis albidis prædita.	ROOT when full grown, nearly the thickneſs of the little finger, often growing obliquely, bit off as it were or ſtumped at the extremity, and furniſhed with long whitiſh fibres.
CAULIS pedalis, ad ſeſquipedalem, ſubereƈtus, nobiſcum raro ſimplex, at in duos, tres, vel plures ramos diviſus, teres, hirſutus, rubeſcens.	STALKS from a foot to a foot and a half high, nearly upright, with us rarely ſingle but divided into two, three or more branches, round, beſet with rough hairs and of a reddiſh colour.
FOLIA radicalia ovalia, petiolis brevibus inſidentia, ſaturate viridia, in petiolum breviter decurrentia, integerrima, pilis longis utrinque hirſuta, caulina oppoſita, connata, lanceolata, rariter dentata, ſuprema ſublinearia, integerrima.	LEAVES next the root, oval, ſtanding on ſhort footſtalks, of a deep green colour, running a little way down the footſtalk, entire at the edge, cover'd on both ſides with long, rough hairs; thoſe on the ſtalk oppoſite, connate, lanceolate, ſparingly toothed on the edge, the uppermoſt nearly linear and entire.
CAPITULI *Florum* ſubgloboſi, cærulei, ſolitarii, pedunculis longis nudis ſeu parum folioſis inſidentibus.	HEADS of the flowers nearly round, blue, ſingle, ſitting on long, naked or almoſt naked flower ſtalks.
CALYX: PERIANTHIUM *commune* multiflorum, patens, polyphyllum; foliolis ovato-acutis, ciliatis, baſi ſubgibboſis, ſeriebus variis receptaculum cingentibus, eique inſidentibus, quorum interiora gradatim minora; *fig.* 1. 11. *Perianthium* proprium duplex, inferius tetragonum, piloſum, germen includens; *fig.* 2. ſuperius germini inſidens, quinquepartitum, laciniis ſetaceis, *fig.* 3.	CALYX: the general PERIANTHIUM ſupports many florets, is ſpreading and compoſed of many leaves, which are of an oval pointed ſhape, edged with hairs, ſomewhat gibbous at the baſe, ſurrounding and ſitting on the receptacle in various rows, of which the innermoſt are gradually the ſmalleſt *fig.* 1. 11. *Perianthium* of each floret double, the lower one four corner'd, hairy, incloſing the germen, *fig.* 2, the upper one ſitting on the germen, divided deeply into five ſegments ſhaped like briſtles. *fig.* 3.
COROLLA monopetala, tubuloſa, quadrifida, laciniis obtuſis, tribus inferioribus ſubæqualibus, ſuperiore longiore. *fig.* 4.	COROLLA monopetalous, tubular, divided into four obtuſe ſegments, the three lowermoſt of which are nearly equal, the uppermoſt ſomewhat longeſt. *fig.* 4.
STAMINA: FILAMENTA quatuor, ſubulata, corollâ fere duplo longiora; ANTHERÆ oblongæ, incumbentes, violaceæ; POLLEN album. *fig.* 5.	STAMINA: four FILAMENTS, tapering to a point, almoſt twice the length of the corolla; ANTHERÆ oblong, incumbent, of a violet colour; POLLEN white. *fig.* 5.
PISTILLUM: GERMEN minimum, albidum, cylindraceo-ovatum; STYLUS filiformis, dum antheræ pollinem dimittunt longitudine labii inferioris corollæ; STIGMA orbiculatum, medio depreſſum. *fig.* 6. 7. 8.	PISTILLUM: GERMEN very ſmall, whitiſh, rarely cylindrical, incloſed within the calyx; STYLE thread ſhaped, while the Antheræ are ſhedding the pollen, the length of the lower lip of the corolla; STIGMA round, flat, with a depreſſion in the middle. *fig.* 6. 7. 8.
SEMEN oblongum, ſulcato-anguloſum, hirſutum, ſetis quinque coronatum. *fig.* 10.	SEED oblong, angular, grooved, beſet with rough hairs and crownd with five ſetæ or briſtles. *fig.* 10.

THE Devils bit is one of thoſe few plants which adorn our Paſtures in Autumn, and is capable of adding ſome beauty even to the flower Garden, in which it grows much more branched than in its wild ſtate and continues in bloſſom from Auguſt to the end of Oƈtober; like Plantain and many other herbs, the root when full grown is ſtumped at the extremity.

" Fabulous antiquity (the Monkes and Fryers as I ſuppoſe being the firſt inventors of the Fable) ſaid, that the
" Devill envying the good that this Herbe might do to mankinde, bit away part of the root and thereof came the
" name of Succiſa or Devils bit. *Parkinſon Theat, p.* 491.

Modern praƈtitioners not finding thoſe wonderfull good effeƈts have rejeƈted it.

According to BERGIUS the root poſſeſſes an aſtringent quality, and the infuſion of it is bitteriſh, but not unpleaſant to the taſte.

The Caterpillar of one of the Fritillary Butterflies (*Papilio maturna* of LINNÆUS, the *greaſy Fritillary* of the Aurelians) feed on the leaves of this ſpecies.

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Scabroſa Succiſa.

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Montia fontana.

MONTIA FONTANA. BLINKS.

MONTIA *Lin. Gen. Pl.* TRIANDRIA TRIGYNIA.

Cal. 2 phyllus. *Cor.* 1 petala irregularis. *Caps.* 1 locularis, 3. valvis.

Raii. Syn. Gen. 24. HERBÆ PENTAPETALÆ VASCULIFERÆ.

MONTIA fontana *Lin. Syſt. Veget. p.* 110. *Sp. pl.* 129. *Suecic. n.* 115.

MONTIA *Haller. Hiſt. n.* 301.

PORTULACA arvenſis. *Bauh. pin.* 282.

CAMERARIA arvenſis minor. *Dill. Giſs.* 46.

PORTULACA exigua ſeu arvenſis Camerarii J. B. III. 678.

PORTULACA tricoccos. *Pet. Herb. Brit.* 10. 12.

ALSINE floſculis conniventibus. *Merr. pin.*

ALSINEFORMIS paludoſa tricarpos floſculis, albis inapertis. *Pluk. Alm.* 21. T. 7. f. 5.

ALSINE parva paluſtris tricoccos, Portulacæ aquaticæ ſimilis. *Raii. Syn. p.* 352. ſmall water Chickweed or Purſlane by ſome called Blinks.

Oeder. Fl. Dan. t. 113.
Hudſon. Fl. Angl. ed. 2. *p.* 60.
Lightfoot. Fl. Scot. p. 110.

RADIX annua, fibroſa.

CAULES plurimi, teretes, glabri, rubentes, in terram reclinati et ſubinde radices agentes, duorum, triumve digitorum longitudine, ramoſi et crebris geniculis intercepti.

FOLIA oppoſita, ſeſſilia, oblonga, acutiuſcula, prope baſin anguſtata, ſubcarnoſa, glabra, pallide virentia.

PEDUNCULI plerumque terni, uniflori, axillares, peractâ floreſcentiâ recurvati, poſtea erecti, foliis longiores, e ſquama membranacea prodeuntes.

CALYX: PERIANTHIUM diphyllum; foliolis ovatis, concavis, obtuſis, erectis, perſiſtentibus. *fig.* 1. 9.

COROLLA monopetala, quinquepartita, alba, laciniis tribus, alternis, minoribus, ſtaminiferis. *fig.* 2. 3. 4.

STAMINA: FILAMENTA tria, capillaria, corollâ breviora, cui inſerta: ANTHERÆ parvæ, albæ. *fig.* 4.

PISTILLUM: GERMEN turbinatum, ſubtriangulare; STYLI tres, villoſi, patentes; STIGMATA ſimplicia. *fig.* 5.

PERICARPIUM: CALYX permanens, auctus, truncatus, continet CAPSULAM, turbinatam, unilocularem, trivalvem, valvulis ovatis, acutis, monoſpermis, demiſſo ſemine filiformibus, calyce paulo longioribus. *fig.* 6. 7. 8. 10.

SEMINA nigra, ſubreniformia. *fig.* 11.

ROOT annual, and fibrous.

STALKS numerous, round, ſmooth, reddiſh, ſpreading on the ground, and ſometimes ſtriking root, two or three inches in length, branched and jointed.

LEAVES oppoſite, ſeſſile, oblong, ſomewhat pointed, narrowed near the baſe, rather fleſhy, ſmooth and of a pale green colour.

FLOWER-STALKS generally growing three together, each ſupporting one flower, proceeding from a little ſcale in the boſom of the leaves, as ſoon as the flowering is over hanging down, afterwards becoming upright and longer than the leaves.

CALYX: a PERIANTHIUM of two leaves: the leaves oval, concave, obtuſe, upright, and permanent, *fig.* 1. 9.

COROLLA of one petal, deeply divided into five ſegments, of a white colour, the three alternate ones leaſt, having the ſtamina attached to them. *fig.* 2. 3. 4.

STAMINA: three ſlender FILAMENTS ſhorter than the corolla to which they are connected: ANTHERÆ ſmall and white *fig.* 4.

PISTILLUM: GERMEN large at top, ſmall at bottom, and ſomewhat triangular; STYLES three, villous, ſpreading; STIGMATA ſimple. *fig.* 5.

SEED-VESSEL: the permanent and encreaſing CALYX, cut off as it were at top contains a CAPSULE of the ſame ſhape as the germen, of one cavity and three valves, the valves ovate, and pointed, each containing one ſeed on the falling of which they become thread ſhaped and a little longer than the calyx. *fig.* 6. 7. 8. 10.

SEEDS black and ſomewhat kidney-ſhaped. *fig.* 11.

THIS plant of which there is but one ſpecies appears firſt to have had a generic character beſtowed on it by DILLENIUS, who called it *Cameraria* in honour of CAMERARIUS a German Phyſician and Botaniſt; MICHELI afterwards figured it among his *Nova Genera* and gave it the name of *Montia* in commemoration of his countryman MONTI an Italian Botaniſt, which name has been adopted by LINNÆUS.

Its parts of fructification which are repreſented in a magnified ſtate, on the Plate, and of which a particular deſcription is given are ſingular enough to juſtify theſe Authors in making it a diſtinct Genus.

The Engliſh name of *Blinks* has perhaps been given to this plant from the bloſſoms uſually appearing in a half opened ſtate, but when the Sun ſhines on them they are fully expanded.

It grows in wet places, eſpecially on the moiſt gravelly parts of Heaths, where the water ſtagnates in the winter, on *Black-Heath*, *Hampſtead-Heath*, and in other ſimilar ſituations it is very common, flowering in May and ripening its ſeed in the beginning of June.

It is eaſy of Cultivation but not remarked for its utility in any reſpect; the ſeed may probably be the food of ſmall Birds.

HYDNUM AURISCALPIUM. FIR HYDNUM.

HYDNUM *Lin. Gen. Pl.* CRYPTOGAMIA FUNGI.

Fungus horizontalis ſubtus echinatus.

Raii. Syn. Gen. 1. FUNGI.

HYDNUM *auriſcalpium* ſtipitatum, pileo dimidiato. *Lin. Syſt. Vegetab. p.* 822. *Spec. Plant.* p. 1648. *Fl. Suecic.* 1100. *Lappon* 524.

ECHINUS petiolo gracili laterali, pileolo plano obſcuro. *Haller Hiſt. n.* 2321.

ERINACEUS parvus hirſutus exfulvo fuſcus, pileo ſemiorbiculari, pediculo tenuiore. *Mich. Gen.* 132. t. 72. f. 8.

FUNGUS erinaceus parvus in conis abietis naſcens. *Buxb. Cent.* 1. t. 57. f. 1.

FUNGUS erinaceus parvus pediculo longiore auriſcalpium referens buxei coloris. *Buxb. hall.* 129. t. 829.

ERINACEUS minimus auriſcalpium referens. *Cels. Ups.* 20.

FUNGUS erinaceus eſculentus parvus, pediculo longiore, auriſcalpium referens, buxei coloris, in ſtrobilis pini eveniens. *Kram. tent.* 146.

Hudſon. Fl. Angl. ed. 2. *p.* 628.
Lightfoot Fl. Scot.
Roſes Elem. of Bot. app. t. 3.
Schæffer. Fung. tab. 143.

	Ex ſtrobilis ſeu ramulis emortuis pini naſcitur hic Fungus.		From the decayed cones or ſmall branches of the fir ſprings this Fungus.
STIPES	pollicaris ſeu bipollicaris, inferne incraſſatus, ſublanuginoſus, ſuperne ad apicem ſenſim attenuatus, pilis numeroſis brevibus, rigidulis, horizontalibus ſcabriuſculis.	STALK	from one to three inches in height, thicken'd at bottom and ſomewhat wooly, from thence to the top gradually tapering and beſet with numerous, ſhort, horizontal, and ſomewhat rigid hairs, which give it a manifeſt roughneſs.
PILEUS	magnitudine unguis indicis, plerumque dimidiatus, rotundato-reniformis, horizontalis, ſuperne planiuſculus, faſciis luteis et fuſcis in orbem diſpoſitis notatus, hirſutus, demum nigricans, inferne caneſcens, echinatus, *fig.* 1. Echini plurimi, conferti, acuminati, ſimplices. *fig.* 2.	HEAD	or cap the ſize of the forefinger nail, in general halved, of roundiſh kidney-ſhape, horizontal, on the upper ſide flattiſh, marked with yellow and brown ſtripes circularly diſdiſpoſed, hirſute, finally becoming black, underneath of a greyiſh colour, and prickly, *fig.* 1. Prickles numerous growing thickly together, ſimple, and running out to a point. *fig.* 2.

SOME of the more antient Botaniſts have given to this ſpecies of *Hydnum* the name of *auriſcalpium* or ear-picker, from its reſemblance to the inſtrument uſed for that purpoſe, but it ſhould be obſerved that it is only when young or ſmall that it bears this reſemblance.

Its habitat is on the half decayed branches, and cones of the Fir Tree, eſpecially the latter, moſt probably it is not attached to any particular ſpecies, the Cones on which I found it were of the *Pinus ſylveſtris.*

In the time of Mr. RAY, it was not known to be a native of Great Britain, of late years it has been found by ſeveral inquiſitive Botaniſts in various parts of the Kingdom, as in *Scotland* by Mr. LIGHTFOOT, near *Norwich* by Mr. ROSE, and in a ſmall pine wood oppoſite to, and by the road only ſeparated from Lord MANSFIELD's Houſe near *Hampſtead* by Mr. DIXON, and from which wood the ſpecimens here repreſented were taken.

The fifth of October 1780, I found a great number of them in the ſaid wood in the greateſt perfection, they grew in the moiſt part of the wood out of the cones buried under the dead leaves.

In its uſe it does not appear to be very important, at leaſt immediately to us, KRAMER applies to it the epithet of *eſculentus*, but of all the Fungi this is the leaſt proper for eating, as it is not only ſmall in quantity but biting to the taſte, and tough as leather.

To the Student it affords a very good example of the Genus *Hydnum*.

Hydnum auriscalpium.

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Anagallis tenella.

ANAGALLIS TENELLA. BOG PIMPERNEL.

ANAGALLIS *Lin. Gen. Pl.* PENTANDRIA MONOGYNIA.

Cor. rotata. *Caps.* circumſciſſa.

Raii. Syn. Gen. 18. HERBÆ FRUCTU SICCO SINGULARI FLORE MONOPETALO.

ANAGALLIS *tenella* foliis ovatis acutiuſculis, caule repente. *Lin. Syſt. Vegetab.* p. 165. *Sp. Pl.* 211.

LYSIMACHIA *tenella. Hudſon. Fl. Angl. ed.* 2. *p.* 87.

ANAGALLIS *tenella Lightfoot Fl. Scot. p.* 139.

NUMMULARIA minor flore purpuraſcente. *Bauhin pin.* 310. *Ger. emac.* 630. *Park* 555. *Raii. Syn. p.* 283. Purple-flowered Moneywort.

RADIX perennis, fibroſa.

CAULES plurimi, bipollicares aut palmares, teretes, glabri, repentes, ramoſi, geniculis purpureis.

FOLIA oppoſita, parva, ſubrotunda, integerrima, utrinque glabra, petiolis breviſſimis inſidentia.

PEDUNCULI axillares, bini, longi, etiam pollicares, erecti, demum incurvati, ſimplices, uniflori.

FLORES ſubcampanulati, pro ratione plantæ majuſculi, venis rubellis, ſaturatioribus picti, *fig.* 3. 4.

CALYX: PERIANTHIUM quinquepartitum, laciniis lanceolatis, concavis, rubro punctatis, corollâ brevioribus. *fig.* 1. 2. 10.

COROLLA rotata, quinquepartita, laciniis ovatis, erectis, acutiuſculis, carneis, venis ſaturatioribus ſtriatis. *fig.* 3. 4.

STAMINA: FILAMENTA quinque, alba, piloſiſſima, pilis albis, ſuberectis, articulatis: ANTHERÆ ovatæ, flavæ. *fig.* .5 6. 7. 8.

PISTILLUM: GERMEN ſubrotundum; STYLUS ſubulatus, antheris paulo longior, STIGMA ſimplex. *fig.* 9.

PERICARPIUM: CAPSULA circumſciſſa, magnitudine ſeminis coriandri, rotunda, pallida, lævis. *fig.* 11. 12.

SMINA plurima, ſubangulata, apice truncata. *fig.* 13. 14.

ROOT perennial and fibrous.

STALKS numerous from two to four inches long, round, ſmooth, creeping, branched, the joints purple.

LEAVES oppoſite, ſmall, nearly round, entire at the edge, ſmooth on both ſides, ſitting on very ſhort foot-ſtalks.

FLOWER-STALKS growing in pairs from the alæ of the leaves, even an inch in length, upright, but finally bent downward, ſingle, and ſupporting one flower on each.

FLOWERS ſomewhat bell-ſhaped, rather large for the ſize of the plant, of a reddiſh colour, and painted with deeper colour'd veins. *fig.* 3. 4.

CALYX: a PERIANTHIUM deeply divided into five ſegments, which are lanceolate, concave, dotted with red, and ſhorter than the corolla. *fig.* 1. 2. 10.

COROLLA wheel-ſhaped, deeply divided into five ſegments, which are ovate, upright, a little pointed, of pale red, ſtriped with veins of a deeper colour. *fig.* 3. 4.

STAMINA: five FILAMENTS, of a white colour and very hairy, the hairs upright, white alſo and jointed; ANTHERÆ ovate and of a yellow colour. *Fig.* 5. 6. 7. 8.

PISTILLUM: GERMEN roundiſh; STYLE tapering, a little longer than the Antheræ; STIGMA ſimple. *Fig.* 9.

SEED VESSEL: a round CAPSULE, ſmooth, of a pale colour, about the ſize of a Coriander ſeed, ſplitting horizontally in the middle. *Fig.* 11. 12.

SEEDS numerous, ſomewhat angular and cut off at top. *Fig.* 13. 14.

IF the horizontal diviſion of the capſule, joined to the hairineſs of the filaments, be the characters which conſtitute the Genus *Anagallis*, this plant is undoubtedly with much propriety referred to it by LINNÆUS, and removed from that of *Lyſimachia* with which it was before connected; for it not only has an evident *Capſula circumſciſſa*, but the hairs of the filaments are alſo jointed, in which they reſemble thoſe of the *Anagallis arvenſis* heretofore deſcribed and figured in the beginning of this work—Producing ripe capſules but ſparingly, and growing in ſituations not always the eaſieſt of acceſs, it is no wonder that theſe diſcoveries ſhould be of modern date.

Mr. HUDSON in the ſecond edition of his *Flora Anglica* without aſſigning any reaſons, chuſes to continue it a *Lyſimachia.*

It is a very common plant on Bogs, indeed there is ſcarce a bog of any extent on which it is not to be found, the boggy part of *Shirley-Common* affords it moſt abundantly, it flowers in the months of June, July, and Auguſt, and towards the end of the latter ripens its capſules.

BIDENS CERNUA. NODDING WATER-HEMP-AGRIMONY.

BIDENS *Lin. Gen. Pl.* SYNGENESIA POLYGAMIA ÆQUALIS. *Recept.* paleaceum. *Pappus* ariſtis erectis ſcabris. *Cal.* imbricatus. *Cor.* rarius floſculo uno alterne radiante inſtructus.

Raii. Syn. Gen. 8. HERBÆ FLORE COMPOSITO DISCOIDE SEMINIBUS PAPPO DESTITUTIS CORYMBIFERÆ DICTÆ.

BIDENS cernua foliis lanceolatis amplexicaulibus floribus cernuis ſeminibus erectis. *Lin. Syſt. Vegetab. p.* 610.

BIDENS foliis ſeſſilibus ſerratis, floribus nutantibus circumvallatis. *Haller. Hiſt.* 120.

BIDENS *cernua Scopoli Fl. Carniol. p.* 176. *n.* 2.

CANNABINA aquatica folio non diviſo. *Bauh. pin.* 321.

VERBESINA pulchriore flore luteo. *I. B. II.* 1074.

EUPATORIÆ Cannabinæ fœminæ varietas altera *Ger. emac.* 711.

EUPATORIUM aquaticum folio integro. *Parkins.* 596.

VERBESINA minima. *Dillen. Cat. Giſs.* 167. *et App.* 66. *Raii. Syn. ed* 3. *t.* 7. *f.* 2.

Raii. Syn. p. 187. Water-Hemp-Agrimony with an undivided leaf.
Hudſon. Fl. Angl. ed. 2. *p.* 356.
Lightfoot. Fl. Scot. p. 463.

RADIX annua, fibroſa, fibris plurimis, majuſculis, alte deſcendentibus.	ROOT annual, and fibrous, the fibres numerous, large, branched, running deep.
CAULIS pedalis, bipedalis, et ultra, erectus, ramoſus, hiſpidulus, purpuraſcens, rubro punctatus, inferne teres, ſuperne ſulcato-ſtriatus, rami oppoſiti, ſuberecti.	STALK from one to two feet high or more, upright, branched, ſomewhat hiſpid, purpliſh, dotted with red, below round, above ſtriated, the branches oppoſite and nearly upright.
FOLIA oppoſita, indiviſa, modice connata, ovato-lanceolata, patentia, ſerrata, utrinque lævia.	LEAVES oppoſite, undivided, moderately connate, ovato-lanceolate, ſpreading, ſerrated, and ſmooth on both ſides.
PEDUNCULI ſtriati.	FLOWER-STALKS ſtriated.
FLORES e luteo vireſcentes, demum cernui, plerumque radiati.	FLOWERS of a yellowiſh green colour, finally drooping, generally radiated.
CALYX communis, foliaceus, foliolis circiter ſeptem, lineari-lanceolatis, ſerrulatis, nervoſis, reflexis, corollâ longioribus.	CALYX common to all the florets leafy, conſiſting of about ſeven leaves, which are of a ſhape betwixt linear and lanceolate, finely ſawed at the edge, rib'd, turning back and longer than the corolla.
COROLLA: PETALA exteriora decem circiter, oblongo-ovata, acutiuſcula, nitida, e flavo-vireſcentia, apice inflexa, lineis parallelis nigricantibus picta, exempta margine; FLOSCULI in diſco numeroſi, æquales, hermaphroditi, infundibuliformes, flavi; *Tubus* cylindraceus, longitudine limbi ſeu paulo longior, *Limbus* campanulatus, quinquedentatus, dentibus ſubſubreflexis. *fig.* 1. 2.	COROLLA: the exterior PETALS about ten in number, of an oblong oval ſhape, ſomewhat pointed, and bending in at the top, of a yellowiſh green colour, ſhining and marked with blackiſh parallel lines except the margin, the FLOWERS in the center numerous, æqual, hermaphrodite, funnel ſhaped and of a yellow colour; the *Tube* cylindrical the length of the limb or a little longer, the *Limb* bell-ſhaped, having five teeth which turn ſomewhat back. *fig.* 1. 2.
STAMINA: FILAMENTA quinque, capillaria; ANTHERÆ nigricantes, in tubum laxum coalitæ. *fig.* 3.	STAMINA: five FILAMENTS, very fine; ANTHERÆ blackiſh, forming a looſe tube. *fig.* 3.
PISTILLUM: GERMEN angulatum, ſubconicum, albidum, apice truncatum, ſuperne e quatuor angulis, ariſtis quatuor longitudine fere floſculi inſtructum. *fig.* 6.	PISTILLUM: GERMEN angular, ſomewhat conical, whitiſh, cut off at top, furniſhed above with four beards or awns proceeding from the four angles almoſt the length of the flower and beſet with little hooks bending backward. *fig.* 6.
SEMEN olivaceo-nigrum, obverſe conicum, tetragonum, angulis ariſtiſque retrorſum ſcabro hamoſis. *fig.* 7.	SEED of a dark olive colour, inverſely conical, four cornered, the corners and beards beſet with little hooks bending backward. *fig.* 7.
RECEPTACULUM paleaceum *Paleis* ſtructuræ petalorum, lanceolatis, longitudine floſculorum. *fig.* 5.	RECEPTACLE chaffy or beſet with numerous lanceolate leaves having the ſtructure of the petals and being as long as the florets. *fig.* 5.

THE Genus *Bidens* of LINNÆUS is chiefly characteriz'd by the ſtucture of its ſeeds, which according to its name ſhou'd be furniſhed with two teeth or awns, to neither of our Engliſh ſpecies does this name however well accord, as the one has generally three and the other four; the awns are furniſh'd with ſmall ſharp hooks, (a curious object for the microſcope) by means of which they often ſtick to ones cloaths, and Mr. LIGHTFOOT mentions that they have been known ſometimes to deſtroy the *Cyprinus auratus* or Gold Fiſh by adhering to their Gills and Jaws.

We have two ſpecies of Bidens common in this country viz the *tripartita* and *cernua*, the *tripartita* is common on the edge of almoſt every pond, the *cernua* delights rather to grow in the water itſelf, in the ditches about St. Georges Fields, in the pond adjoining Hornſey Wood, and in ſimilar ſituations about London it is very frequently met with, it flowers in the month of September, a month later than the *tripartita*.

Like all other plants it is ſubject to vary, being ſometimes found without its exterior petals, and ſometimes in very drys ſeaſons when the Sun has exhaled the water from the pond it has grown in, it has been found ſo dwarfiſh as not to exceed two or three inches in height, a plant of this kind is figured on the plate, *fig.* 8, DILLENIUS finding it in this ſtate, deſcribed and figured it is in his edition of RAYS *Synopſis*, as a diſtinct ſpecies and LINNÆUS probably relying on his authority adopted it as ſuch in his *Species plantarum* but HALLER who had ſeen the Plant very juſtly conſiders it as only a variety and Mr. LIGHTFOOT concurs with him in opinion, Mr. HUDSON with his uſual inaccuracy in the ſecond edition of his *Flora anglica* gives it as a variety of the *tripartita*.

The flowers of this ſpecies have a ſtrong and not a very diſagreeable ſmell, hence they promiſe to poſſeſs ſome medicinal powers, it is ſaid by LINNÆUS, to dye yellow, but not ſo powerfully as the *tripartita*.

Bidens cernua.

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Avena elatior.

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AVENA ELATIOR. TALL OAT-GRASS.

AVENA *Lin. Gen. Pl.* TRIANDRIA DIGYNIA
Cal. 2 valvis, multiflorus: ariſta dorſali contorta.
Raii. Syn. Gen. 27. HERBÆ GRAMINIFOLIÆ FLORE IMPERFECTO CULMIFERÆ.
AVENA *elatior* paniculata, calycibus bifloris, floſculo hermaphrodito ſubmutico, maſculo ariſtato.
Lin. Syſt. Vegetab. p. 104. *Sp. Pl. p.* 117. *Fl. Suec. N.* 102.
AVENA diantha folliculis baſi villoſis, majoris ariſta geniculata. *Haller Hiſt. n.* 1492.
GRAMEN nodoſum avenacea panicula. *Bauh. pin.* 2. *Scheuchz. Agroſt p.* 239.
GRAMEN caninum nodoſum. *Ger. em.* 23.
GRAMEN caninum bulboſum vulgare. *Park.* 1075.
GRAMEN avenaceum elatius, juba longa ſplendente *Raii. Meth.* 179. *Syn. p.* 406. 4.
Hudſon. Fl. Angl. ed. 2. p. 53.
Lightfoot Fl. Scot. p. 105.
Oeder Fl. Dan. t. 165.
Schreber Gram. t. 1.

RADIX perennis, fibroſa, fibris plurimis, flexuoſis, fuſcis, intertextis.	ROOT perennial, fibrous, the fibres numerous, crooked, of a brown colour, and matted together.
CULMI bi aut tripedales, etiam ultra, erecti, tribus quatuorve geniculis purpuraſcentibus diſtincti, teretes, læves, baſi in bulbillos ſæpe excreſcente.	STALKS from two to three feet high, or even more, upright, having four or five joints of a purpliſh colour, round, ſmooth, the baſe often growing out and forming ſmall bulbs.
FOLIA caulina, ſpithamea, etiam pedalia, duas treſve lineas lata, una cum vaginâ ſtriata, lævia.	LEAVES of the ſtalk ſix or ſeven inches or even a foot in length, from two to three lines in breadth, together with the ſheath ſtriated and ſmooth.
PANICULA longa, etiam pedalis, erecta, ſplendens, laxe coarctata, *ramulis* plurimis, inæqualibus, ſubſecundis.	PANICLE long, even the length of a foot, upright, ſhining, looſely cloſing together, *branches* numerous, unequal, growing in ſome degree to one ſide.
SPICULÆ bifloræ, altero floſculo hermaphrodito, altero maſculo. *fig.* 1.	SPICULÆ containing two flowers, the one male and the other hermaphrodite. *fig.* 1.
CALYX, *Gluma* bivalvis, valvulis inæqualibus, membranaceis, acutis, albidis, majore nervis tribus viridibus, minore unico inſignitis. *fig.* 2.	CALYX: a *Glume* of two valves, the valves unequal, membranous, pointed, whitiſh, the largeſt marked with three and the ſmalleſt with one green nerve. *fig.* 2.
COROLLA *maris*: valvulæ duæ, longitudine æquales, altera majore, concava, nervis ſex viridibus notata, apicibus ſæpius purpuraſcentibus, acuta, ariſtata, *Ariſta* infra medium exſertâ, ſpiculâ longiore, geniculata, inferne ſpiraliter contorta, ſuperne ſetacea; altera planiuſcula, apice bicuſpidata; valvulæ *hermaphroditi* quoad formam vix diſcrepant, at nervus medius prope apicem valvulæ exterioris, in ariſtam brevem excurrit, et baſis ejuſdem valvulæ pilis plurimis obtegitur. *fig.* 3. 4.	COROLLA of the *male* flower; compoſed of two valves, equal in length, the largeſt hollow, and marked with ſix ribs, generally purple at top, pointed and bearded; *Beard* or awn growing out from below the middle of the valves, longer than the ſpicula, and jointed, on the lower part ſpirally twiſted, on the upper briſtle ſharped, the leaſt flattiſh and terminaing in two points; the valves of the *hermaphrodite* floſcule differ but little from the male one as to ſhape but the midrib in the outer valve runs out into a ſhort awn and the bottom of the ſame valve is covered with numerous hairs. *fig.* 3. 4.
NECTARIUM *Glumulæ* duæ lanceolatæ, baſi ſubgloboſæ. *fig.* 6.	NECTARY: two ſmall *Glumes*, lanceolate, ſomewhat globular at bottom.
STAMINA: FILAMENTA tria, capillaria; ANTHERÆ oblongæ, flavæ, bifurcatæ.	STAMINA: three FILAMENTS very fine, ANTHERÆ oblong, yellow, and forked.
PISTILLUM: GERMEN ſubovatum, villoſum; STYLI duo, magni, ramoſiſſimi, reflexi. *fig.* 7.	PISTILLUM: GERMEN ſomewhat ovate, villous; STYLES two, large, very much branched and hanging down. *fig.* 7.
SEMEN oblongum, læve, intra glumas calycinas baſi piloſas, liberum *fig.* 8. 9. 10.	SEED oblong, ſmooth, contained looſely within the glumes of the calyx which are hairy at bottom, *fig.* 8. 9. 10.

Experience muſt determine how far this Graſs deſerves the attention of the Farmer, thus much I may inform him, that it is one of the earlieſt Graſſes in the Spring, that it produces a great crop, and when cut down after ſeeding, it has flower'd afreſh in the autumn, theſe are certainly ſome of the neceſſary requiſites in a good Graſs, yet it does not often occur in meadows but is rather fond of growing on banks, in hedges and on the borders of fields, where it is very conſpicuouſly in bloſſom in *June* and *September*, nevertheleſs I have occaſionally ſeen it growing in Paſtures; the only objection to it perhaps is its coarſeneſs, which however ſhould not prevent the Farmer from giving it a fair trial.

In particular ſituations the upper part of the root or rather baſe of the ſtalk becomes knobby, and it then forms the *Gramen caninum nodoſum of* GERARD, this in ſome arable Land, I have been informed is very troubleſome, and eradicated as Couch; inſtances often occur in which a valuable plant in one ſituation is a perfect weed in another.

It is the moſt common of all our Oat-graſſes and is therefore not liable to be miſtaken for any other of the ſame genus.

As it varies with reſpect to its root, ſo does it alſo with regard to its ariſtæ, of which in general there is only one to each ſpicula, but ſometimes each floſcule contained in the ſpicula has an ariſta, in which caſe one is uſually longer than the other.

In the graſſes no character is more inconſtant than that of the awn, ariſta, or beard, in ſome graſſes whoſe character it is to be *muticæ* it is preſent as in the *Lolium perenne*, *Agroſtis capillaris*, and *alba*; and in others whoſe character it is to be *ariſtatæ* it is wanting, as in the *Agroſtis canina*, the ſtriking alteration in the appearance of the graſs from this circumſtance has often been the cauſe of multiplying ſpecies unneceſſarily.

TRIFOLIUM REPENS. DUTCH CLOVER.

TRIFOLIUM *Linnæi Gen. Pl.* DIADELPHIA DECANDRIA.

Flores ſubcapitati. *Legumen* vix calyce longius, non dehiſcens, deciduum.

Raii Syn. Gen. 24. HERBÆ FLORE PAPILIONACEO SEU LEGUMINOSÆ.

TRIFOLIUM *repens* capitulis umbellaribus, leguminibus tetraſpermis, caule repente. *Lin. Syſt. Vegetab. p.* 572. *Sp. Pl. p.* 1080. *Flor. Suec. n.* 665.

TRIFOLIUM caule repente; ſpicis depreſſis; ſiliquis tetraſpermis. *Haller Hiſt. n.* 367.

TRIFOLIUM repens. *Scopoli Fl. Carniol.*

TRIFOLIUM pratenſe album. *C. B. Pin.* 327.

TRIFOLIUM minus pratenſe, flore albo. *Ger. emac.* 1185. *Parkinſon* 1110. *Raii Syn. p.* 327. White-Flowered Trefoil.

Hudſon Fl. Angl. ed. 2. *p.* 324.

Lightfoot Fl. Scot. p. 404.

RADIX perennis, fibroſa.	ROOT perennial and fibrous.
CAULES plurimi, repentes, late ſparſi, teretes, ſimplices, glabri, virides, ſeu purpuraſcentes.	STALKS numerous, creeping, ſpreading wide, round, unbranched, ſmooth, green, or purpliſh.
STIPULÆ ovato-lanceolatæ, venoſæ, venis purpuraſcentibus.	STIPULÆ ovate and pointed, veiny, the veins purpliſh.
FOLIA terna, variabilia, nunc ovata, obtuſa, nunc obcordata, emarginata, acute ſerrata, viridia, ſeu purpuraſcentia, maculâ lunulatâ albicante plerumque notata.	LEAVES growing three together, variable as to their ſhape, being ſometimes ovate and blunt, ſometimes inverſely heart-ſhaped and notched at the end, ſharply ſawed round the edge, of a green or purpliſh colour, and having moſt commonly a whitiſh mark in the centre.
PEDUNCULI longiſſimi, erecti, ſtriati.	FLOWER-STALKS very long, upright, and ſtriated.
FLORES plerumque albi, purpuraſcentes etiam occurrunt, glomerati, junioribus erectis, maturis deflexis, fuſcis.	FLOWERS generally white, but ſometimes purpliſh, growing in a cluſter, the young ones upright, the old ones hanging down and becoming brown.
CAPITULA majuſcula, præſertim in cultâ planta, ſphærica.	HEADS large, eſpecially in the cultivated plant, and of a round ſhape.
CALYX: PERIANTHIUM monophyllum, quinquedentatum, ſæpius coloratum, ſtriis decem elevatis notatum, dentibus ſetaceis, duobus ſuperioribus paulo longioribus, *fig.* 1.	CALYX: a PERIANTHIUM of one leaf, having ten teeth, generally coloured, marked with ten ribs, the teeth briſtle-ſhaped, the two uppermoſt ſomewhat the longeſt, *fig.* 1.
COROLLA papilionacea, calyce duplo longior; VEXILLUM oblongum, ſubemarginatum, reflexum, *fig.* 2. ALÆ duæ, vexillo multo breviores, *fig.* 3. CARINA breviſſima, baſi bifida, *fig.* 4.	COROLLA papilionaceous, twice the length of the calyx; STANDARD oblong, ſlightly notched at the extremity, and turning back, *fig.* 2. WINGS two, much ſhorter than the ſtandard, *fig.* 3. KEEL very ſhort, divided at the baſe, *fig.* 4.
STAMINA: FILAMENTA diadelpha, ſimplex et novem-fidum, *fig.* 5, 6. ANTHERÆ parvæ, luteæ.	STAMINA: ten FILAMENTS, one ſingle, the reſt united into one body, *fig.* 5, 6. ANTHERÆ ſmall, and yellow.
PISTILLUM: GERMEN oblongum, teretiuſculum; STYLUS ſubulatus, longitudine germinis; STIGMA flaveſcens, capitatum, *fig.* 7.	PISTILLUM: GERMEN oblong, roundiſh; STYLE tapering, the length of the germen; STIGMA yellowiſh, forming a little head, *fig.* 7.
PERICARPIUM: LEGUMEN oblongum, teres, mucronatum, toruloſum, *fig.* 8. continens	SEED-VESSEL: an oblong, round, jointed pod, *fig.* 8. terminating in a point and containing
SEMINA duo ad quatuor, *fig.* 9.	SEEDS from two to four, *fig.* 9.

The creeping or Dutch Clover may be conſidered as one of our moſt valuable Britiſh plants, the greateſt part of the ſeed uſed in this country is imported from Holland, where it is cultivated on account of its ſeed, and hence it has acquired the name of Dutch Clover; as it is a plant which grows naturally wild in this country, on dry, gravelly, and indifferent ſoils, it is probable it might alſo be cultivated for the ſame purpoſe in many parts of Great-Britain, where land and labour are cheap, and that to great advantage.

The quantity of ſeed ſold annually in this country is aſtoniſhingly great, Meſſrs. GORDON and DERMER, who do not particularly deal in this article, ſell every year forty or fifty tons weight of it.

Thoſe plants which have creeping roots or ſtalks have the advantage of moſt others in point of growth, and when a plant of this kind, growing naturally in a barren ſoil, comes to have the advantage of cultivation, it flouriſhes amazingly, ſo does the Dutch Clover, a ſingle ſeedling of which I have known in a garden to cover more ground than a yard ſquare, in one ſummer.

Although this plant does not grow ſo tall as ſome others, yet the vaſt number of ſtalks, leaves, and bloſſoms which it throws out, produces a great bottom in a paſture, and thereby ſtamps a particular value on it.

It is not a plant however which makes any great figure in the ſpring, but its chief excellence conſiſts in its producing herbage in dry ſummers, late in the ſeaſon, when moſt of the graſſes are burnt up, it then covers the fields with a beautiful verdure, and affords plenty of food to the cattle, or hay for a ſecond crop.

There is an idea very prevalent among farmers, that aſhes alone ſpread on land will produce this plant in abundance; they do not know, or will not believe, that the plant previouſly exiſted in the ground, and is only rendered larger and more conſpicuous by the manure.

Of the *Trifolium repens* I have obſerved two remarkable varieties, viz. one with leaves of a deep purple colour, cultivated in gardens as an ornamental plant, the other proliferous, having ſmall heads of leaves growing out of the flowers, this I found ſeveral years ago on the left-hand ſide of the canal, leading from *Limehouſe* to *Bromley*; there are likewiſe ſeveral other varieties which depend on the richneſs and poverty of ſoil.

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Trifolium repens.

Phallus impudicus.

PHALLUS IMPUDICUS. STINKING MORELL.

PHALLUS *Lin. Gen. Pl.* CRYPTOGAMIA FUNGI.
Fungus ſupra reticulatus, ſubtus lævis.
Raii Syn. Gen. 1. FUNGI.
PHALLUS *impudicus* volvatus ſtipitatus, pileo celluloſo. *Lin. Syſt. Vegetab. p.* 822. *Spec. Plant.* 1648. *Fl. Suec. n.* 1261.
PHALLUS *impudicus. Scopoli Fl. Carn. n.* 1650.
FUNGUS fœtidus, penis imaginem referens. *C. B. Pin.* 374.
PHALLUS *Hollandicus. Park.* 1322. *Raii. Syn. p.* 12. *Hudſon Fl. Angl. ed.* 2. *p.* 629. *Lightfoot Fl. Scot. p.* 1044. *Fl. Dan. t.* 175. *Schæffer Icon. Fung. t.* 196, 197, 198.

RADIX fibroſa, fibris majuſculis, teretibus, albis, paulo infra terram repentibus, quibus hic illic accreſcunt globuli albi, qui juſtam magnitudinem acquiſiti, ſupra terram eminent et Volvæ dicuntur, *fig.* 1, 2.	ROOTS fibrous, the fibres large, round, white, creeping a little under the ſurface of the earth, to which grow here and there white globules or tubercles, which when full grown project above the ſurface of the earth, and are called Volvæ or Eggs, *fig.* 1, 2.
VOLVA ſubrotunda, baſi paululum compreſſa, lævis, magnitudine pilæ palmariæ, alba, ponderoſa, tunicâ ſatis craſſâ exterius tecta, cui proxime ſubeſt gelatina quædam pellucida, flavo-fuſca, *fig.* 3, 5.	EGGS roundiſh, a little flattened at the baſe, ſmooth, the ſize of a tennis ball, white, heavy, covered with an outer coat of a moderate thickneſs, immediately under which lies a thick maſs of tranſparent jelly of a yellowiſh brown colour, *fig.* 3, 5.
STIPES: diſrupta volva, exſurgit ſtipes, craſſitie pollicis, palmaris et ultra, paululum curvatus, teres, albus, levis, ſpongioſus, fiſtuloſus, utrinque acuminatus, *fig.* 6.	STALK: on the burſting of the egg the ſtalk riſes up, and is about the thickneſs of the thumb, four inches and more in height, a little crooked, round, white, ſpongy, hollow, very light and pointed at both ends, *fig.* 6.
PILEUS ſubconicus, ſtipiti laxe inſidens, primo lævis, ſolidus, olivaceus, lubricus, mox fœtidiſſimus, cellulis materie ſeminiferâ externe poſita adhuc repletis, quâ diffluente aut muſcis exſucta, ſuperficies externa celluloſa apparet, interna parum rugoſa, vertice truncato, albiſſimo, oblongo, pervio, *fig.* 4, 7, 8.	CAP ſomewhat conical, fitting looſely on the ſtalk, at firſt ſmooth, ſolid, of an olive colour, and ſlippery, ſoon becoming highly fetid, the cells being as yet filled with the matter containing the ſeed, which flowing out or being eaten by flies, the outer ſurface appears cellular, the inner a little wrinkled, the top as if cut off, very white, oblong, and open, *fig.* 4, 7, 8.

In the months of Auguſt, September, and October, this ſingular phenomenon of the Fungus tribe makes its appearance in woods, hedge-rows, and hedges, in ſome places abundantly, in others rarely; near London it has been found in *Coombwood* and *Norwood*, but more plentifully in a ſmall fir wood near the *Spaniard, Hampſtead-Heath*, before remarked for producing the *Hydnum auriſcalpium;* in this wood, on the 24th of September 1780, I diſcovered near a dozen growing within a ſmall ſpace of each other, ſome were full-grown, others in their egg-ſtate, riſen about half way out of the ground, and, when taken up, appearing like ſo many ſmall tennis balls, *vid. fig.* 2. ſeveral of theſe I carefully carried home; one, which was in its greateſt perfection, my draughtſman, for the ſake of more conveniently drawing, took with him to the *Spaniard* (a place of entertainment on the ſpot) but the fetor ariſing from it quickly pervading every part of the houſe, and rendering it intolerable, we were obliged to get rid of it.

On perpendicularly dividing with a ſharp knife one of thoſe I had taken home, I was not more ſtruck with the beautiful appearance which the ſurface of each half exhibited, than the thick maſs of pure tranſparent jelly, of a browniſh yellow colour, depoſited betwixt two membranes, immediately under the outer ſurface, and which enveloped the Fungus, as yet in embryo, *vid. fig.* 3.

On examining my Fungi in their egg-ſtate the next morning, I had the ſatisfaction to obſerve, that in one of them, the cap of the Fungus had juſt broken through its integuments, and was puſhing itſelf up through the jelly; I thought this a proper opportunity of obſerving how quick it was in its growth, and found, that from the time of its breaking through the outer ſkin (half paſt eight o'clock) to the time that it acquired its full height, a ſpace intervened of about five hours, in which time it had grown three inches and three quarters; an inſtance of the quickneſs of vegetation ſcarce credible, and perhaps not to be equalled by any other plant.

The cap, on its firſt coming forth, being covered with the jelly through which it had paſſed, and being alſo of a light olive colour, but perfectly opake, not unaptly reſembled a lump of bird-lime, *vid. fig.* 4. this appearance it retained till eleven o'clock, when in ſome parts it became of a darker colour; at half paſt twelve the whole outer ſurface of the cap was changed to a very dark olive; it now began to ſmell very offenſively, flies came into the room and ſettled on it; a little paſt one, it began to diſſolve, and drop off, and the cells containing this ſubſtance about the top of it began to be viſible, *fig.* 7. It was now placed out of doors, when the Pileus was almoſt immediately covered with ſeveral ſpecies of flies, moſtly of the larger ſort, who, inſtead of ſticking to and periſhing on it, as related by GLEDITSCH, in about two hours left the cells perfectly empty, *vid fig.* 8.

The diſagreeable ſmell ariſing from the *Phallus impudicus*, which alone is often ſufficient to detect it, and from which it has acquired in ſome parts of the kingdom the name of *Stink-horns*, has uſually been compared to carrion, and generally conſidered as the effects of its putrefaction: to me, the ſmell appears to be altogether *ſui generis*, and not to ariſe from putrefaction, at leaſt a general putrefaction of the plant; it firſt ariſes from the ſubſtance lodged in the cells on the outſide of the Pileus, which conſtitute the generic character of the *Phallus*, and with which the ſeeds of this plant are doubtleſs incorporated; as ſoon as this ſubſtance begins to liquefy, the effluvia is perceptible; at this time every other part of the plant is perfectly ſweet, not excepting the jelly, which, it muſt be allowed, afterwards acquires a diſagreeable odour, apparently from its putrefaction. The flies, allured by the effluvia from the Pileus, do not ſettle on it to depoſit their eggs, as on the *Stapelia fœtida*, or putrid meat, but merely to feed on it, and which they appear to do moſt deliciouſly, ſcarcely ever ſuffering a drop of the liquid to fall on the ground; whence this ſpecies would ſoon become extinct, had not provident Nature ſupplied it with a root, which, like the Potatoe, throws out numerous offſets.

This plant affords nouriſhment not only to various ſpecies of flies, but alſo to ſnails and ſlugs, who are extremely fond of its ſtem.

We may remark, that the top of the cap has ſometimes two perforations, inſtead of one, its uſual number.

AGARICUS GLUTINOSUS. SLIMY MUSHROOM.

AGARICUS *Lin. Gen. Pl.* FUNGI.

Fungus horizontalis, ſubtus lamelloſus.

Raii. Syn. Gen. 1. FUNGI.

AGARICUS *glutinoſus* pileo hemiſphærico ſtramineo viſcido, lamellis horizontalibus, annulo obſoleto.

FUNGI pratenſes minores, externe viſcidi, albi et lutei, pedicules brevibus. *Raii Syn. p.* 7. 2.

STIPES plerumque ſolitarius, ſubinde multiplex, bipollicaris ad palmarem, craſſitie pennæ coracis, filiformis, albidus, pene ſolidus, tubo minimo, glutinoſus.

ANNULUS paulo infra pileum obſoletus.

PILEUS uncialis, ad biuncialem, ſtramineus, in adultis hemiſphæricus, ſemper convexus, et glutine plus minuſve obductus, pluviis madefactus magis fuſceſcit, et diaphanus evadit, unde ſtriatus aliquando apparet.

LAMELLÆ plurimæ, ſimplices, e fuſco purpuraſcentes, nebuloſæ, integris circiter 20, horizontalibus, *fig.* 1. tribus brevioribus interpoſitis, *fig.* 2, 3. Pulverem effundunt e fuſco purpuraſcentem.

Fig. 5. Fruſtulum lamellæ vitro auctum, exhibens *Capſulas* ſeminiferas quaternas.

STALKS generally ſingle, ſometimes cluſtered from two to four inches in height, the thickneſs of a crow quill, thread-ſhaped, whitiſh, almoſt ſolid, the tube being very ſmall, glutinous.

RING a little below the cap, ſcarce perceptible.

CAP from one to two inches in breadth, of a ſtraw colour; in the full grown ones hemiſpherical, always convex, and more or leſs glutinous, wet with rain it becomes browner and tranſparent, ſo that it ſometimes appears as if ſtriated.

GILLS numerous, ſingle, of a browniſh purple colour, clouded, whole ones about twenty, horizontal, *fig.* 1. three ſhorter ones placed betwixt them, *fig.* 2, 3. they throw out a powder of a browniſh purple colour.

Fig. 5. a ſmall piece of the gill magnified, in which are ſhewn the *Capſules*, which contain the ſeeds placed four together.

Lithologia mihi criſtas non eriget, ſays LINNÆUS in the preface to his mineralogy; he might with equal propriety have applied the ſame expreſſions to himſelf reſpecting the *Fungi*, as in the laſt edition of his *Syſtema Vegetabilium* we are preſented with no more than twenty-four ſpecies of *Agrici Stipitati*, or Muſhrooms with ſtalks: MICHELI, on the contrary, has given us ſix hundred and thirty-four; RAY, in the third edition of his *Synopſis*, has fifty-ſeven ſpecies, fourteen of which are added by DILLENIUS; GLEDITSCH, who has written a particular treatiſe on the *Fungi*, reduces the *Agarici* to thirty-two ſpecies, but informs us that there are one hundred and twenty more, involved in much obſcurity; SCOPOLI deſcribes one hundred and fourteen, and HALLER one hundred and thirty-four; Mr. HUDSON, in the laſt edition of his *Flora Anglica*, enumerates forty-ſix, and Mr. LIGHTFOOT accurately deſcribes twenty in his *Flora Scotica;* and yet amidſt all theſe enumerations and deſcriptions, ſcarce any two of them are agreed about the ſame Fungus; of the hundred and fourteen deſcribed by SCOPOLI there are only eleven which have the names of LINNÆUS; the *procerus* of SCOPOLI is the *annulatus* of LIGHTFOOT; the *coriaceus* of LIGHTFOOT is the *pratenſis* of HUDSON; while the *coriaceus* and *pratenſis* of SCOPOLI differ from both theirs.

Amidſt this confuſion of Authors, ariſing partly from the intricacy of the ſubject, and partly from their inattention to ſpecific characters, we ſhall be often obliged to be ſparing in our ſynonyms, and occaſionally find it neceſſary to produce a new name as in the preſent inſtance.

Although the Fungus here figured is a very common one, we are not able with abſolute certainty to ſay that it is either in RAY, LINNÆUS, SCOPOLI, LIGHTFOOT, or HUDSON; the name of *glutinoſus* is therefore given it, as it always is more or leſs ſlimy, and which ſlimineſs is not confined to the upper part of the cap, but extends to the ſtalk: this character joined to the roundneſs of the cap, and the horizontal appearance of the gills which form a ſtraight line from the edge of the cap to the ſtalk, will always readily diſtinguiſh this Muſhroom.

The cap varies in ſize from two lines to two inches in diameter, and the ſtem from one to four or five in height, the uſual colour of the cap is of a pale ſtraw colour, ſometimes inclined more to the yellow, and ſometimes more to a dirty brown, eſpecially when wet; it is gradual in its decay, not quickly diſſolving as ſome do, nor drying up like others.

It moſt commonly grows ſingly, but ſometimes ſprings up in cluſters, eſpecially on thoſe ſpots where dung has been thrown.

Its place of growth is in expoſed and elevated paſtures, eſpecially ſuch as are moiſt; it may indeed be found in moſt meadows, and ſometimes in great abundance; the particular places where I have been accuſtomed to find it plentifully, are on *Peckham-Rye*, and in the paſtures about the *Oak of Honour Wood*, alſo in the paſture one aſcends, before entering *Hornſey-Wood*, going from *Iſlington*.

About the latter-end of October they are moſt plentiful, but may be found earlier as well as later.

There is nothing acrimonious or diſagreeable in the taſte of it, yet its appearance will not recommend it to the lovers of Muſhrooms.

Agaricus glutinoſus.

Veronica officinalis.

VERONICA OFFICINALIS. MALE SPEEDWELL.

VERONICA *Lin. Gen. Pl.* DIANDRIA MONOGYNIA.
Cor. Limbo 4. partito, laciniâ infima anguſtiore. *Capſula* bilocularis.
Raii Syn. Gen. 18. HERBÆ FRUCTU SICCO SINGULARI FLORE MONOPETALO.
VERONICA *officinalis* ſpicis lateralibus pedunculatis, foliis oppoſitis, caule procumbente. *Lin. Syſt. Vegetab.* p. 56. *Sp. Pl.* 14. *Fl. Suec. n.* 12.
VERONICA caule decumbente, foliis ſcabris, petiolatis, ovatis, ex alis racemoſa. *Haller hiſt. n.* 540.
VERONICA *officinalis. Scopoli. Fl. Carn. n.* 21.
VERONICA mas ſupina et vulgatiſſima. *Bauh. Pin.* 246.
VERONICA vera et major. *Ger. emac.* 626.
VERONICA mas vulgaris ſupina. *Parkinſ.* 550. *Raii Syn. p.* 281. The Male Speedwell or Fluellin.
Hudſon Fl. Angl. ed. 2. *p.* 4.
Lightfoot Fl. Scot. p. 27.
Oeder Fl. Dan. t. 248.

RADIX perennis, fibroſa.	ROOT perennial and fibrous.
CAULES palmares ſeu ſpithamæi, teretes, hirſuti, rigiduli, repentes.	STALKS from three to ſeven inches in length, round, hirſute, ſtiffiſh, and creeping.
FOLIA oppoſita, petiolata, preſertim inferiora, hirſutula, ſerrata, pollicaria, inferiora, baſi anguſtata, ſuperiora ovali-oblonga, obtuſa, paulo majora, ſubſeſſilia.	LEAVES oppoſite, ſtanding on footſtalks, eſpecially the lower ones, ſomewhat hairy, ſerrated, about an inch in length, the lower ones narrowed at the baſe, the upper ones of an oblong or oval ſhape, obtuſe, ſomewhat larger than the lower ones and nearly ſeſſile.
RACEMI ſolitarii, ſive gemini, in ſummitate laterales, axillares ex foliis, pedunculati, erecti, nudi, pubeſcentes, floribus ſparſis, brevius pedicellatis.	FLOWER-BRANCHES ſingle, or growing in pairs, from the ſide near the top of the ſtalk, out of the alæ of the leaves, ſtanding on a foot-ſtalk, upright, naked, downy, the flowers placed on ſhort foot-ſtalks without any regular order.
BRACTEÆ ad flores, ſolitariæ, lineares, obtuſæ, pubeſcentes, longitudine vix calycis, erectæ.	FLORAL-LEAF, one placed ſingly under each flower, linear, obtuſe, downy, ſcarce the length of the calyx, and upright.
CALYX: PERIANTHIUM monophyllum, quadripartitum, hirſutum, pilis apice glanduligeris, laciniis ovato lanceolatis ſubæqualibus, *fig.* 1.	CALYX: a PERIANTHIUM of one leaf, deeply divided into four ſegments, beſet with rough hairs which are glandular at the top, the ſegments oval pointed, and nearly equal, *fig.* 1.
COROLLA monopetala, rotata; *Tubus* brevis, albidus, *Limbus* quadripartitus, dilute violaceus, venis ſaturatioribus pictus, laciniis ovatis, obtuſis, inæqualibus; tribus majoribus ſubæqualibus, unica duplo anguſtiore, *fig.* 2.	COROLLA monopetalous and wheel-ſhaped; the *Tube* ſhort and whitiſh; the *Limb* divided into four ſegments, of a faint violet colour, painted with more deeply coloured veins, the ſegments ovate, obtuſe, and unequal; the three largeſt nearly equal; the ſingle one twice as narrow as the others, *fig.* 2.
STAMINA: FILAMENTA duo, albida, tubo inſerta, corollâ longiora; ANTHERÆ cordatæ, cœruleſcentes; POLLEN album, *fig.* 3.	STAMINA: two FILAMENTS, of a whitiſh colour, inſerted into the tube, and longer than the corolla: ANTHERÆ heart-ſhaped, of a blueiſh colour; POLLEN white, *fig.* 3.
PISTILLUM: GERMEN ſubovatum, obtuſum, compreſſum, viſcoſum, utrinque ſulcatum, baſi glandulâ cinctum; STYLUS filiformis, verſus apicem paululum incraſſatus, violaceus; STIGMA truncatum, *fig.* 4.	PISTILLUM: GERMEN ſomewhat ovate, obtuſe, flattened, clammy, grooved on each ſide, ſurrounded at its baſe by a gland; STYLE thread-ſhaped, a little thickened towards the top, of a violet colour; STIGMA as if cut off, *fig*, 4.
PERICARPIUM: *Capſula* cordata, compreſſa, calyce paulo longior, *fig.* 5.	SEED-VESSEL: a heart ſhaped flattened *Capſule*, a little longer than the calyx, *fig.* 5.
SEMINA plurima, parva, compreſſa, pallide fuſca, *fig.* 6.	SEEDS numerous, ſmall, flattened, of a pale brown colour, *fig.* 6.

On dry mountainous ſituations, as on Hampſtead Heath, and about Charlton Wood, we find this ſpecies of *Veronica* in great abundance, producing flowers from June to Auguſt, or later.

Its principal diſtinguiſhing character is its creeping ſtalk, which in ſome ſituations is more ſtrictly ſo than in others, I have obſerved it on ſome dry heaths, creeping cloſe to the earth, and in other places ſcarcely procumbent, but it always has this character in a greater or leſs degree.

In the colour of its bloſſoms it varies much, they being in ſome ſituations almoſt blue, in others reddiſh, and in others white; and it is ſaid to have been found with double flowers.

When it meets with a luxuriant ſoil, its ſtalks will extend a foot or two, and its leaves equal thoſe of the *Veronica Chamædrys* in ſize.

Many writers on the Materia Medica have been laviſh of their encomiums on its virtues. RUTTY thus ſpeaks of it.

“ It has a faint ſmell which is not diſagreeable, to the taſte it is bitteriſh and ſomewhat aſtringent; the extract of it was alſo bitter and aſtringent, but that prepared with ſpirit of wine ſtronger than that prepared with water, and both ſomewhat acrid, the bitterneſs reſides moſt in the reſinous part.

“ An infuſion of it on the addition of vitriol of iron became of a greeniſh brown colour, and with ALSTON black; blue paper it made red.

“ In its external uſe the cleanſing and aſtringent powers which it poſſeſſes, place it among the principal vulneraries, bad ulcers it cleanſes, and diſpoſes them to heal; I have myſelf been witneſs of its efficacy in this reſpect, applied to an inveterate cancerous ulcer in the form of a cataplaſm, from diſcharging a thin ichor, it produced a laudable pus.

“ It has been found ſerviceable alſo in the itch, and other cutaneous diſeaſes; made into a gargle with the addition of honey of roſes, it cures the thruſh, and other ulcers of the mouth and throat.

“ Taken inwardly it relieves the aſthmatic, attenuating and promoting the expectoration of viſcid phlegm, and drank as tea; it alſo proves ſerviceable in wounds or ulcers of the lungs, &c. &c.

Theſe good effects, related with ſo much confidence by the Doctor, we have tranſlated, and preſent to our readers, ſhould they not be exaggerated the *Veronica officinalis* has very unmeritedly fallen into diſuſe.

EPILOBIUM MONTANUM. WOOD WILLOW-HERB.

EPILOBIUM *Linnæi Gen. Pl.* Octandria Monogynia

Calyx quadrifidus. *Petala* quatuor. *Capſula* oblonga, infera. *Semina* papposa.

Raii Synopſ. Gen. 22. Herbæ vasculiferæ flore tetrapetalo anomalæ.

EPILOBIUM foliis oppoſitis, ovatis, dentatis, *Linnæi Syſt. Vegetab.* p. 296. *Fl. Suecic.* n. 329.

EPILOBIUM foliis ovato-lanceolatis, glabris, dentatis, *Haller Hiſt. n.* 996.

CHAMAENERION montanum *Scopoli Fl. Carn.* p. 270.

LYSIMACHIA ſiliquoſa glabra major. *Bauhin* p. 245.

LYSIMACHIA ſiliquoſa major *Parkinſon.* 548.

LYSIMACHIA campeſtris. *Gerard emac* 478. *Raii. Hiſt.* p. 861. The greater ſmooth-leaved codded Willow-herb or looſe ſtrife. *Syn.*

Hudſon. Fl. Angl. ed. 2. *p.* 4.
Lightfoot Fl. Scot. p. 198.

RADIX perennis, ſublignoſa, fibroſa, gemmulis ruberrimis ſuperne inſtructa.

CAULIS pedalis ad tripedalem, erectus, rubicundus, teres, ſubpubeſcens, ſuperne ramoſus, ſæpe vero ſimplex.

RAMI oppoſiti.

FOLIA oppoſita, pedicellis breviſſimis baſi connatis inſidentia, ovato acuta, argute dentata, ſuperne glabra, inferne pallidiora, venoſa, hirſutula, imis ſæpe ruberrimis.

CALYX: Perianthium ſuperum, tetraphyllum, foliolis lanceolatis, nervo medio conſpicuo, *fig.* 1.

COROLLA: Petala quatuor, obcordata, profunde emarginata, pallide purpurea, calyce longiora, patentia. *fig.* 2.

STAMINA: Filamenta octo, ſubulata, alba, quorum quatuor alterna breviora, Antheræ flaveſcentes. *fig.* 3.

PISTILLUM: Germen tetragonum, inferum, prælongum, ſulcatum; Stylus albus, longitudine ſtaminum, apice paululum incraſſatus; Stigma quadrifidum, album, laciniis patentibus, non vero revolutis. *fig.* 4. 5.

SEMINA minima, pappoſa. *fig.* 6.

ROOT perennial, ſomewhat woody and fibrous, on its upper part furniſhed with little buds of a bright red colour.

STALKS from one to three feet high, upright, of a red colour, round, ſcarce preceptibly downy, branched above, but often ſingle.

BRANCHES oppoſite.

LEAVES oppoſite, ſitting on very ſhort footſtalks, whoſe baſes unite, ovate and pointed, ſharply toothed on the edges, on the upper ſide ſmooth, on the under ſide of a paler colour, veiny and very ſlightly hairy, the bottom ones often of a bright red colour.

CALYX: a Perianthium placed above the germen, compoſed of four narrow pointed leaves, in which the midrib is conſpicuous. *fig.* 1.

COROLLA four Petals inverſely heart-ſhaped, deeply notched, of a pale purple colour, longer than the calyx and ſpreading. *fig.* 2.

STAMINA eight Filaments, tapering, of a white colour, four of which are alternately ſhorter; Antheæ yellowiſh. *fig.* 3.

PISTILLUM: Germen four cornered, placed beneath the calyx, very long and grooved; Style white, the length of the ſtamina, thickened a little at top; Stigma divided into four ſegments, white, the ſegments ſpreading but not rolled back. *fig.* 4. 5.

SEEDS very ſmall and downy. *fig.* 6.

MOST of the Willow-herbs that we have already figured, have grown in wet ſituations, this rather delights in Woods, Hedge-rows, ſhady Lanes, and Hedges, ſometimes it is alſo found on Walls in Courts and Areas; it flowers from June to Auguſt.

We ſometimes find it having three or four leaves at each joint, a variety to which moſt of this family is ſubject.

Epilobium montanum.

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Iris Pseudacorus.

IRIS PSEUDACORUS. YELLOW IRIS.

IRIS *Lin. Gen. Pl.* TRIANDRIA MONOGYNIA
Cor. Limbo 4. partito: *Petalis* alternis reflexis. *Stigmata* petaliformia.
Raii. Syn. Gen. 26. HERBÆ RADICE BULBOSA PREDITÆ.
IRIS *Pſeudacorus* corollis imberbibus, petalis interioribus ſtigmate minoribus, foliis enſiformibus. *Lin. Syſt. Vegetab. p.* 79. *Sp. Pl. p.* 56. *Fl. Suec. n.* 37.
IRIS caule inflexo, foliis enſiformibus; petalis erectis, minimis, reflexis, imberbibus. *Haller Hiſt. n.* 1260.
IRIS *Pſeudacorus. Scopoli. Fl. Carn. n.* 49.
IRIS paluſtris lutea. *Ger. em.* 50.
ACORUS adulterinus. *Bauh. pin.* 74.
ACORUS paluſtris, ſive Pſeudo-iris et Iris lutea paluſtris. *Park* 1219. *Raii. Syn. p.* 174. Yellow water Flower-de-luce.
Hudſon. Fl. Angl. ed. 2. *p.* 14. *Lightfoot. Fl. Scot. p.* 86. *Oeder. Fl. Dan. t.* 404.

RADIX perennis, craſſitie pollicis, horizontalis, foris nigricans, intus rubicundus, ſpongioſus, ſuperne plurimis fibrillis rigidis obtecta, inferne dimittens radiculas longas, albidas, rugoſas.	ROOT perennial, the thickneſs of ones thumb, horizontal, externally blackiſh, reddiſh withinſide, and ſpongy, the upper part covered with numerous rigid fibres, its lower part ſending down many long, whitiſh, wrinkled, ſtringy roots.
FOLIA radicalia, bi aut tripedalia, erecta, lata, enſiformia, nervo eminente, baſi equitantia, caulina breviora, alterna, baſi vaginantia.	LEAVES from the root, two or three feet high, upright, broad, ſword-ſhaped, with a prominent midrib, at bottom riding one on another and covered with a glutinous ſubſtance, thoſe on the ſtalk ſhorter, alternate, forming a ſheath at the bottom.
CAULIS pedalis ad tripedalem, erectus, e geniculo ad geniculum alterne inclinatus, teres, lævis, ſpongioſus.	STALKS from one to three feet in height, upright, alternately inclined from joint to joint, round, ſmooth, and ſpongy.
FLORES erecti, ſpecioſi, flavi.	FLOWERS upright, ſhowy, of a yellow colour.
PEDUNCULI axillares, ſemiteretes, glabri.	FLOWER-SLALKS proceeding from the alæ of the leaves, round, but flattened on one ſide and ſmooth.
CALYX: SPATHA biflora aut triflora, bivalvis, trivalvis aut quadrivalvis ſecundum numerum florum.	CALYX, a SPATHA containing two or three flowers, of two, three, or four valves according to the number of flowers.
COROLLA ſexpartita; PETALA tria exteriora ampla, ovato rotundata, reflexa, lineis rubris ſeu ex rubro-fuſcis ad baſin laminæ picta, ad baſin unguis biforaminoſa, tria interiora primo erecta, cito inflexa, ſtigmate breviora, oblonga, baſi anguſtata, intus cava. *fig.* 1. 2.	COROLLA deeply divided into ſix ſegments: the three outermoſt ſegments or PETALS large, of a roundiſh oval ſhape, turning back, painted at the baſe of the broad part with lines of a reddiſh brown colour, and at the bottom of the claw or narrow part having the appearance of two ſmall holes. *fig.* 1. 2.
STAMINA: FILAMENTA tria, ſubulata, compreſſa; ANTHERÆ oblongæ, luteæ, marginibus purpuraſcentibus, ab incumbente ſtigmate in arcum depreſſæ, biloculares, loculæ lineares, inferne dehiſcentes, *fig.* 3.	STAMINA: three FILLAMENTS flat and tapering; ANTHERÆ oblong, yellow, edges purpliſh, bent down by the ſtigma preſſing on them, having two cavities which are linear and open on the under ſide. *fig.* 3.
PISTILLUM: GERMEN inferum, oblongum, trigonum, angulis obtuſis ſulcatis; STYLUS tenuis, germine brevior; STIGMA maximum, tripartitum, flavum, laciniis oblongis, ſuperne carinatis, inferne concavis apice trifidis, venoſis, ſerrulatis, ſegmento medio breviſſimo, infero. *fig.* 4. 5. 6.	PISTILLUM: GERMEN placed below the corolla, three cornered, the angles blunt and grooved; STYLE ſlender, ſhorter than the ſtigma; STIGMA very large, deeply divided into three ſegments, of a yellow colour, the ſegments oblong, above keel-ſhaped, below concave, at the top veiny, ſawed at the edge and ſubdivided into three ſegments of which the middle one is very ſhort and placed underneath. *fig.* 4. 5. 6.
PERICARPIUM: CAPSULA oblonga, angulata, trilocularis, trivalvis. *fig.* 7.	SEED-VESSEL an oblong, angular CAPSULE, of three cavities and three valves. *fig.* 7.
STAMINA plurima, magna, flaveſcentia, utrinque compreſſa. *fig.* 8.	SEEDS numerous, large, of a yellowiſh colour and flattened on both ſides. *fig.* 8.

MANY of the plants of this tribe recommend themſelves to our notice by the beauty and delicacy of their bloſſoms, ſome by their medicinal, and others by their oeconomical uſes; the preſent plant may perhaps put in its claim on each of theſe accounts, and though its flowers may not poſſeſs the fragrance ſo grateful in the *Iris perſica*, the magnificence which aſtoniſhes in the *ſuſiana*, or the variety of colours which glow in the *verſicolor*, yet thoſe who have examined its ſtructure muſt allow it to be at once beautiful, delicate, and ſingularly curious; the Stigma in particular deſerves to be noticed by the Student, being in form and ſubſtance more like the petals than the part it really is.

As to its medicinal powers——the root is without ſmell, viſcid, and of a ſweetiſh taſte, its infuſion and decoction at firſt very ſweet, then highly aſtringent, preſently producing a ſenſe of heat in the throat, which continued with me for more than twelve hours. *Rutty Mat Med.*

An infuſion of it became black on the addition of Vitriol of iron. *id.*

In drying it loſes much of its acrimony. *id.*

Cut into the form of peaſe it is uſeful to deſtroy the proud fleſh in iſſues, and promotes their diſcharge *id.*

The juice has been uſed to promote ſneezing, but being highly acrimonious of itſelf, a few drops of it mix'd with milk has been uſed to produce that effect in the tooth-ach. *id.*

The juice of the root has alſo been recommended to be applied to creeping ulcers, and being conſidered as poſſeſſing conſiderable aſtringent powers, it has been adminſtered in fluxes but very injudiciouſly according to ſome modern experiments made with it, (*vid Edinburg Med. Eſſays*) by which it was found that eighty drops of this juice repeated every hour or two, proved an excellent purgative where Jalap and Gamboge had in vain been exhibited. On the whole it appears to be a violent medicine, and to be uſed with great caution. The only account we have of its oeconomical uſes is, that an infuſion or decoction of it like that of galls and other vegetable aſtringents is capable with the addition of iron of being converted into ink, or of dying black, to both of which purpoſes it has long been applied in Scotland and the adjacent Iſles. *Sibbald. Lightfoot.*

It is a very common plant in marſhy meadows, by the ſides of rivers, ponds, &c. and flowers in the beginning of July.

Planted in the garden where the ſoil is moiſt, it encreaſes exceedingly both by root and ſeeds.

LYCOPUS EUROPÆUS. WATER HOREHOUND.

LYCOPUS *Lin. Gen. Pl.* DIANDRIA MONOGYNIA
Cor. 4. fida: lacinia unica emarginata. *Stamina* diſtantia, *Semina* 4. retuſa.
Raii. Syn. Gen. 14. SUFFRUTICES ET HERBÆ VERTICILLATÆ.

LYCOPUS *europæus* foliis ſinuato-ſerratis. *Lin. Syſt. Vegetab.* p. 63. *Sp. Pl.* p. 30. *Fl. Suec.* n. 31.
LYCOPUS foliis acute ſerratis et appendiculatis. *Haller Hiſt.* 220.
LYCOPUS *europæus. Scopoli Fl. Carn. n.* 29.
LYCOPUS paluſtris glaber *J. R. H.* 191.
MARRUBIUM paluſtre glabrum *Bauh. p.* 230.
MARRUBIUM aquaticum. *Ger. emac.* 700.
MARRUBIUM aquaticum vulgare. *Parkins.* 1230. *Raii. Syn.* p. 236. Water Horehound.

Hudſon Fl. Angl. ed. 2.
Lightfoot Fl. Scot.

RADIX perennis, repens.

CAULIS pedalis, ad tripedalem, erectus, quadratus, hirſutus, ad baſin uſque ramoſus; *Rami* oppoſiti.

FOLIA oppoſita, ovata, acuta, ſeſſilia, ſubrugoſa, hirſutula, ſinuato-ſerrata.

FLORES parvi, albi, ad genicula in verticillos denſos diſpoſiti.

CALYX: PERIANTHIUM monophyllum, tubulatum, ſemiquinquefidum, hirſutum, laciniis acuminatis. *fig.* 1.

COROLLA monopetala, alba, *Tubus* cylindraceus, brevis, *Limbus* quadrifidus, villoſus, laciniis ſubæqualibus, ſuperiore emarginatâ, omnibus præſertim inferiore rubro punctatis. *fig.* 2. 3.

STAMINA: FILAMENTA duo, corollâ longiora, primum inflexa, demum recta; ANTHERÆ parvæ, ſublunulatæ, albidæ. *fig.* 4.

PISTILLUM: GERMEN quadrifidum, ſubſtantiâ glandulosâ ad baſin cinctum; STYLUS filiformis, rectus, longitudine Staminum; STIGMA bifidum. *fig.* 5.

SEMINA quatuor, *fig.* 9. fuſca, nitida, oleo quaſi illinita, ſubtriangularia, externe planiuſcula, lineâ, ſubcordata in medio impreſſâ, interne medio ad angulum producto, lateribus ſubinvolutis. *fig.* 6. externe. *fig.* 7. interne viſum.

ROOT perennial and creeping.

STALKS from one to three feet in height, upright, four corner'd, beſet with rough hairs, branched quite to the bottom; *Branches* oppoſite.

LEAVES oppoſite, ovate, pointed, ſeſſile, ſomewhat wrinkled, ſlightly hirſute, ſawed at the edge, the inciſions deep and ſomewhat waved.

FLOWERS ſmall, and white, diſpoſed round the joints in thick whirls.

CALYX: a PERIANTHIUM of one leaf, tubular, and hirſute, ſlightly divided into five ſegments, which run out to a fine point. *fig.* 1.

COROLLA monopetalous and white, *Tube* cylindrical, ſhort, *Limb* divided into four ſegments, blunt, ſpreading, villous within, the ſegments nearly equal, the uppermoſt notched, all of them eſpecially the lower one dotted with red, *fig.* 2. 3.

STAMINA: two Filaments, longer than the corolla, at firſt bent in, afterwards ſtraight; ANTHERÆ ſmall, ſomewhat creſcent-like and whitiſh. *fig.* 4.

PISTILLUM: GERMEN divided into four parts, ſurrounded at bottom by a glandular ſubſtance; STYLE filiform, ſtraight, the length of the Stamina; STIGMA bifid. *fig.* 5.

SEEDS four, *fig.* 9. brown, ſhining as if anointed with oil, ſomewhat triangular, externally flattiſh, with an impreſſed ſomewhat heart-ſhaped line in the middle, internally the middle running out to a point or angle, the ſides ſomewhat rolled in *fig.* 6. ſeen externally. *fig.* 7. internally.

THIS is one of the moſt common plants one meets with in Meadows, by the ſides of rivers, and ſtreams of water, it flowers in Auguſt and September.

In its habit it manifeſts the greateſt affinity with the *Herbæ verticillatæ* of RAY, but like the genus *Salvia*, differs from them in its fructification.

The leaves vary in being more or leſs hairy, and more or leſs finely divided.

In ſome Meadows it abounds ſo much as to be noxious to the farmer; Cattle appear never to touch it; its root being of the creeping kind, renders it difficult of extirpation.

It is ſaid to give a durable ſtain to whatever it touches, to be uſed by the French as an aſſiſtant ingredient in dyeing black, and by Gypſies in ſtaining their ſkins. *Lin. flor. ſuec. Hallr. hiſt. helv.*

Lycopus europæus.

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Circæa lutetiana.

CIRCÆA LUTETIANA. ENCHANTERS NIGHTSHADE.

CIRCÆA *Lin. Gen. Pl.* DIANDRIA MONOGYNIA

Cor. dipetala. *Cal.* diphyllus, ſuperus. *Sem.* 1. biloculare.

Raii. Syn. Gen. 19. 20. HERBÆ VASCULIFERÆ, FLORE DIPETALO ET TRIPETALO.

CIRCÆA *lutetiana*, caule erecto, racemis pluribus, foliis ovatis. *Lin. Syſt. Vegetab.* p. 55. *Sp. Pl. p.* 12. *Fl. Suecic.* n. 6.

CIRCÆA foliis ſubcordatis ſubſerratis. *Haller hiſt.* n. 813.

CIRCÆA lutetiana. *Scopoli. Fl. Carn.* n. 6.

CIRCÆA lutetiana. *Lob. ic.* 266. *Ger. emac.* 351.

CIRCÆA lutetiana major. *Park.* 351.

SOLANIFOLIA Circæa dicta major. *Bauh, pin.* 168.

OCYMASTRUM verrucarium. J. B. 11. 977. *Raii. Synops.* p. 289. Enchanters Nightſhade.

Oeder. Fl. Dan. t. 256.
Lightfoot Fl. Scot. p. 20.
Hudſon. Fl. Angl p. 10.

RADIX perennis, repens, ſtolonibus albis.	ROOT perennial and creeping, its young ſhoots white.
CAULIS pedalis ad ſeſquipedalem, ſuberectus, teres, lævis, geniculis incraſſatis, purpuraſcentibus, ramoſus.	STALKS from a foot to a foot and half in height, nearly upright, round, ſmooth, the joints ſwelled and purpliſh, branched.
RAMI oppoſiti, longi, inferne folioſi, ſuperne pubeſcentes.	BRANCHES oppoſite, long, on the lower part leafy, on the upper downy.
FOLIA oppoſita, petiolata, ſubcordata, acuta, lævia, inferne pallidiora, margine dentata.	LEAVES oppoſite, ſtanding on foot-ſtalks, ſomewhat heartſhaped, pointed, ſmooth, of a paler green on the under ſide, the edge toothed.
FLORES parvi, albidi, ſummitatibus ramulorum racematim inſidentes.	FLOWERS ſmall, whitiſh, placed on the tops of the branches in racemi.
PEDUNCULI alterni, demum deflexi.	FLOWER-STALKS alternate, finally turned downwards.
CALYX: PERIANTHIUM diphyllum, foliolis ovatis, concavis, deflexis, purpureis, pedunculo communi inſidentibus. *fig.* 1. 9.	CALYX: a PERIANTHIUM of two leaves, which are ovate, hollow, turned back, of a purple colour, ſitting on one common footſtalk. *fig.* 1. 9.
COROLLA: PETALA duo, obcordata, longitudine calycis, patentia, æqualia, carnea, ſeſſilia. *fig.* 2.	COROLLA: two PETALS inverſely heartſhaped, the length of the calyx, ſpreading, equal, fleſh-colour'd and ſeſſile *fig.* 2.
STAMINA: FILAMENTA duo, capillaria, erecta, alba; ANTHERÆ ſubrotundæ, majuſculæ, albidæ. *fig.* 3.	STAMINA: two FILAMENTS, very fine, upright, of a white colour; ANTHERÆ roundiſh, rather large, of a whitiſh colour. *fig.* 3.
PISTILUM: GERMEN inferum, hiſpidum; STYLUS filiformis, longitudine Staminum; STIGMA bifidum, ruberrimum. *fig.* 4. 8.	PISTILLUM: GERMEN placed below the calyx, hiſpid, and grey; STYLE filiform, the length of the Stamina; STIGMA bifid, of a bright red colour. *fig.* 4. 8.
PERICARPIUM: CAPSULA turbinato-ovata, compreſſa, hiſpida, pilis uncinatis, bilocularis, bivalvis, a baſi ad apicem dehiſcens. *fig.* 5. 6.	SEED-VESSEL: a CAPSULE ſomewhat egg-ſhaped, but conſiderably broadeſt at one end, flatten'd, hiſpid, the hairs hooked at the extremity, having two cavities and two valves, and opening ftom the bottom to the top. *fig.* 5. 6.
SEMINA duo, oblonga, inferne anguſtiora. *fig.* 7.	SEEDS two, oblong, narroweſt at the bottom. *fig.* 7.

THE *Enchanters Nightſhade* is a plant by no means uncommon in particular ſituations, as in ſhady lanes, in orchards, under hedges, walls, and in woods, it flowers in July and Auguſt; the Botaniſt will diſcover many beauties in its fructification, the gardener finds a difficulty in deſtroying it, its root being of the creeping kind.

Its ſeeds being arm'd with little hooks are apt to adhere to ones cloaths.

The caterpillar of the *Sphinx Elpenor* or *Elephant Hawk Moth* which chiefly confines itſelf to the *Galium paluſtre* or *marſh Ladies Bedſtraw* has ſometimes been found feeding on this plant, nor is this the only inſtance of its departure from its uſual food, in the Autumn of ſeventy-nine the ſame ſpecies of caterpillar was ſent me from the country, the plant on which it was there found was the *Arum Dracunculus* or *Dragons*, one very diſſimilar in its nature to the *Galium*, I have often had occaſion to obſerve that ſome caterpillars will periſh unleſs they have their peculiar food, while others will devour any vegetable that preſents itſelf; who would think that the *Phalæna Braſſicæ*, would feed heartily, and be nouriſhed by the leaves of the *deadly Nightſhade*, or the roots of the *Onion*? yet I have myſelf been an eye witneſs to both inſtances.

AGARICUS PLICATILIS. PLAITED MUSHROOM.

AGARICUS *Lin. Gen. Pl.* CRYPTOGAMIA FUNGI.

Fungus horizontalis, ſubtus lamelloſus.

Raii. Syn. Gen. 1. FUNGI.

AGARICUS *plicatilis* ſtipitatus, pileo campanulato ſeu plano, murino, pellucido, plicato.

AGARICUS *crenulatus* membranaceus cœruleſcens ſulcatus, centro papillari, ſtipite exili. *Muller. Fl. Dan. t.* 832. *f.* 2.

FUNGUS perpuſillus, pediculo oblongo, pileolo tenui, utrinque ſtriato, ſeu flabelli in modum plicatili. *Raii. Syn. p.* 8. *n.* 24?

Batarr. Fung. Tab. 27. *B. C.*

STIPES ſolitarius, in adultis biuncialis et ultra, magnitudine culmi triticei minoris, erectus, teres, filiformis, fiſtuloſus, lævis, albus, tener.	STALKS ſingle, in thoſe which are full grown two inches or more in height, the ſize of a ſmall wheat ſtraw, upright, round, of the ſame thickneſs throughout, hollow, ſmooth, white, and tender.
PILEUS cum primo erumpit nucleum nucis avellanæ magnitudine æquat, e flavo-fuſcus, vix manifeſte ſtriatus, cito oblongo campanulatus evadit, ſtriæ ſubundulatæ magis luculenter apparent, color in murinum incipit tranſire, nunc adultus, forma in campanulatam mutatur, mox evaſura plana, uncialis ſeu ſeſquiuncialis, murinus, vertice plano, fuſco ſeu albido, tenellus, plicatus; cutis diaphanus, ſine carne, ſuperne farinâ nullâ adſperſus, faſtigiis plicarum ſubvilloſis, peractâ floreſcentia margo invertitur et nigreſcit.	CAP when it firſt ſprings up is about the ſize of the kernel of a hazle nut, of a yellowiſh brown colour, ſcarce preceptibly ſtriated, it ſoon becomes of an oblong bell-ſhape, the ſmall furrows appear more evidently, are ſomewhat waved, and the colour changes to grey or mouſe colour, now full grown, it becomes more bell-ſhaped, and afterwards appears flat, is from an inch to an inch and half in diameter, of a mouſe colour, tender, plaited, the crown flat, brown or whitiſh; the ſkin tranſparent, without any fleſh, at top not ſprinkled with meal, the ridges of the plaits ſomewhat villous, when the fructification is over, the edge becomes black and turns in.
LAMELLÆ paucæ, concolores, pulverem ſubtiliſſimum e cæruleo-nigricantem effundentes.	GILLS few, of the ſame colour as the cap, throwing out a very fine powder of a blueiſh-black colour.

THE Muſhroom here figured in its ſeveral ſtates is one of thoſe, whoſe caps in decaying diſſolve into a black liquid, theſe in general are of ſhort duration, and this being of ſo thin and delicate a ſubſtance is particularly ſo. On the twelfth of September ten or twelve of theſe of different ages made their appearance on a graſs plat in my garden, and on the ſixteenth no traces of them were to be ſeen.

Its uſual place of growth is in Paſtures, Meadows, and Graſs Plats, in all of which it is not unfrequent in the Months of September and October.

The Cap is ſo remarkably plaited, or fan-like, that we could not but prefer a name expreſſive of ſo characteriſtic a circumſtance to MULLERS term *crenulatus*, the *Agaricus tenellus* of Mr. HUDSON approaches ſo near to ours from his deſcription, that we ſhould have conſidered it as the ſame, had not PLUKENETS figure quoted by him been very different.

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Agaricus plicatilis.

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Hypnum purum

Sanſom Sculp

HYPNUM PURUM MEADOW HYPNUM.

HYPNUM *Lin. Gen. Pl.* CRYPTOGAMIA MUSCI.

Anthera operculata, *Calyptra* lævis, *Filamentum* laterale ortum e perichætio.

Raii Syn. Gen. 3. MUSCI.

HYPNUM *purum* ſurculis pinnato-ſparſis ſubulatis, foliis ovatis obtuſis conniventibus. *Lin. Syſt. Vegetab.* p. 108. *Sp. Pl.* 1594. *Fl. Suecic.* 1031.

HYPNUM ramis teretibus, foliis ovato lanceolatis, ſetis prælongis, capſulis inclinatis, ariſtatis.

HYPNUM *purum. Scopoli Fl. Carniol.* n. 1326.

HYPNUM cupreſſiforme vulgare, foliis obtuſis. *Dillen muſc.* p. 309 *fig.* 45.

MUSCUS ſquamoſus cupreſſiformis. *Vaillant Bot. pariſ.* p. 138. n. 15. *Tab.* 28. f. 3.

HYPNUM terreſtre erectum, ramulis teretibus, foliis inter rotunda et acuta medio modo ſe habentibus. *Raii. Syn.* 81.

Hudſon. Fl. Angl. ed. 2. *p.* 504.

Lightfoot Fl. Scot. p. 753.

CAULES teretiuſculi, ſuberecti, ſimplices ſeu ramoſi, ſquamoſi, nitentes, apicibus plerrumque craſſioribus.	STALKS roundiſh, ſomewhat upright, ſimple or branched, ſcaly, ſhining, the tops generally thicken'd.
RAMULI pinnato-ſparſi, teretiuſculi, ſubulati, plerumque recurvi.	SMALL BRANCHES numerous, irregularly pinnated, tapering, generally bent back.
FOLIA ovata, obtuſa, mucronata, convexo concava, tenera, nitida, denſe imbricata, adpreſſa, pallide virentia *fig.* 1. *auct.*	LEAVES ovate, obtuſe, but terminated by a ſhort point or awn, convex on one ſide and concave on the other, tender, ſhining, numerous, laying cloſely one over the other, of a pale green colour. *fig.* 1. magnif.
PEDUNCULI nobiſcum non raro occurunt menſe Novembri, unciales et biunciales, erecti, inferne ruberrimi, ſuperne flaveſcentes, parum flexuoſi, nitidi.	PEDUNCLES not unfrequent with us in the month of November are from one to two inches in length, upright, below of a bright red colour, above yellowiſh, a little crooked and ſhining.
PERICHÆTIUM oblongum, ſquamoſum, ſquamæ erectæ, lanceolatæ, adpreſſæ. *fig.* 2.	PERICHÆTIUM oblong, ſcaly, ſcales upright, lanceolate and preſs'd to the bulb. *fig.* 2.
CAPSULÆ adultæ ſubovatæ, parum nutantes; *fig.* 5. 8. *Calyptra* membranacea, lævis, primo erecta *fig.* 4. cito caduca *fig.* 3. *Operculum* breve, conicum, *fig.* 6. 7; *Ciliæ*, externæ plurimæ, ſetaceæ, rigidulæ, rufeſcentes; internæ membranâ connexæ, apice convergentes; *Pollen* ſeu *Semen* vireſcens. *fig.* 10.	CAPSULES when full grown are ſomewhat ovate, and a little nodding *fig.* 5. 8. *Calyptra* membranous, ſmooth, at firſt upright *fig.* 4. ſoon falling off *fig.* 3; *Operculum* ſhort and conical *fig.* 6. 7; the outer *Ciliæ* numerous, tapering, ſomewhat rigid and of a reddiſh brown colour, the the internal ones connected by a membrane and converging to a point; *Pollen* or ſeed of a greeniſh colour. *fig.* 10.

THE *Hypnum purum* has been conſidered as producing its Fructifications but ſparingly, yet if it be examined at the proper ſeaſon of the year viz. in the month of November, the period of its greateſt perfection, it will not be found deficient in this reſpect, at that time its leaves are of a bright green colour, but as the plant advances they change to a yellower hue than moſt others.

DILLENIUS makes no mention of the Calyptra belonging to this moſs, from whence it would appear that like moſt other Botaniſts he examined it at too late a period; in general thoſe Capſules which have a ſhort Operculum carry the Calyptra but a little while, as in the preſent plant, while thoſe in which the operculum is long bear it often to the falling off of the operculum itſelf as in the *Bryum undulatum*.

This is one of the moſt general Moſſes we have, growing in woods, in paſtures and by hedge ſides univerſally, in the former it is moſt frequently found with its capſules, the oak of Honour Wood and the woods adjoining produce it in this ſtate at the time above mentioned in the greateſt plenty; being a moſs generally free from all impurities it is made uſe of by the anglers in Lancaſhire and probably in other counties to ſcour their worms in. *Dill. hiſt. muſc. p.* 310.

DIPSACUS SYLVESTRIS. WILD TEASEL.

DIPSACUS *Lin. Gen. Pl.* TETRANDRIA MONOGYNIA
Calyx communis, polyphyllus; *proprius* ſuperus. *Recept.* paleaceum.
Raii. Syn. Gen. 8. HERBÆ CORYMBIFERIS AFFINES.
DIPSACUS capitulis ovatis, foliis arcuatis circumvallatis, ariſtis ſquamarum rectis. *Haller hiſt.* n. 198.
DIPSACUS ſylveſtris ſeu Labrum Veneris. *I. B.* III. 74.
DIPSACUS ſylveſtris aut Virga paſtoris major. *C. B. pin.* 385.
DIPSACUS ſylveſtris. *Ger. emac.* 1167. *Parkins.* 984.
Hudſon. Fl. Angl. ed. 2. *p.* 6.
Lightfoot Fl. Scot. p. 113.
Jacquin Fl. Auſtr. 4. 402.

RADIX biennis, ſimplex, fibris majuſculis donatus.

CAULIS tripedalis ad orgyalem, ramoſus, teres, ſtriatus, inanis, inferius ſpinis rarius diſpoſitis, prope capitula creberrimis horridus.

FOLIA *radicalia* primi anni ſupra terram in orbem ſparſa, ovato-oblonga, obtuſiuſcula, crenato-ſerrata, rugoſa, ſpinulis rarioribus aſpera, *caulina* ſaltem inferiora minus rugoſa, baſi adeo connata ut ſinum magnum efficiant, poſt pluvias aquâ plenum, ovato-acuta, crenata, ſpinis ad marginem et nervum medium rarius obſitum, *ſumma* minus connata, magiſque lanceolata, integerrima et fere inermia.

CAPITULA plurima, ſolitaria, erecta, ovato-oblonga, ſubacuminata.

FLORES purpurei, circa medium capituli primo erumpentes.

INVOLUCRUM polyphyllum, foliolis ſublinearibus, rigidis, ſpinuloſis, ſurſum arcuatis, longitudine capituli, inæqualibus.

CALYX: PERIANTHIUM proprium, minimum, viride, ciliatum. *fig.* 1.

COROLLA monopetala, tubuloſa; *Tubus* infundibuliformis, baſi attenuatus, albidus, ad lentem villoſulus; LIMBUS quadrifidus, erectus, purpureus, laciniis obtuſis, extimâ majori. *fig.* 2.

STAMINA: FILAMENTA quatuor, albida, capillaria, recta, tubo corollæ inſerta; ANTHERÆ incumbentes, oblongæ, violaceæ. *fig.* 3.

PISTILLUM: GERMEN inferum, tetragonum, albidum, ſulcatum, margine ſuperne viridi; STYLUS filiformis albus, corollâ paulo brevior; STIGMA canaliculatum, ſubinflexum *fig.* 4. 5. 6.

RECEPTACULUM paleaceum, paleis longitudine ſtaminum, rigidis, ariſtatis, ſupremis longioribus, baſi concavis, ſubtriangularibus; *Ariſta* acuminata, recta, hiſpidula. *fig.* 8.

ROOT biennial, ſimple, furniſhed with large fibres.

STALK from three to ſix feet high, branched, round, ſtriated, hollow, ſpinous, ſpines near the baſe but few, near the heads very numerous, long and ſharp.

LEAVES: *radical* leaves of the firſt years plant ſpread on the ground in a circular form, are of an oblong oval ſhape, bluntiſh at the point, notched on the edges, wrinkled, and rough with ſpines thinly ſcatter'd over the leaf, thoſe *of the ſtalk* at leaſt the lowermoſt ones, are leſs wrinkled, and united at the baſe in ſuch a manner as to form a large cavity, which contains water after rain, of an oval pointed ſhape, notched, and thinly beſet with ſpines on the edge and mid-rib, the *uppermoſt* leaves ſlightly united at the baſe, narrower, entire, and almoſt free from ſpines.

HEADS numerous, growing ſingly on footſtalks, upright, of an oblong egg ſhape, ſomewhat pointed at top.

FLOWERS purple, firſt breaking forth about the middle of the head.

INVOLUCRUM compoſed of many leaves which are ſomewhat linear, rigid, beſet with ſmall ſpines, bending upwards, the length of the heads, unequal.

CALYX: the PERIANTHIUM of each floſcule is very minute, green and edged with hairs. *fig.* 1.

COROLLA monopetalous, tubular; the *Tube* funnel-ſhaped, narrowed at the baſe, whitiſh and ſlightly villous if magnified; the *Limb* divided into four ſegments, upright, purple, the ſegments obtuſe, the outermoſt largeſt. *fig.* 2.

STAMINA: four FILAMENTS, of a whitiſh colour, very fine, ſtraight, inſerted into the tube of the corolla; ANTHERÆ incumbent, oblong, of a violet colour. *fig.* 3.

PISTILLUM: GERMEN placed below the calyx, four corner'd, whitiſh, grooved, the edge on the upper pait green; STYLE thread-ſhaped, white, a little ſhorter than the corolla, STIGMA channeled and bent a little in. *fig.* 4. 5. 6.

RECEPTACLE chaffy chaff the length of the Stamina, rigid, bearded, the uppermoſt longeſt, at bottom hollow, and ſomewhat triangular; the *Beard* or awn running out to a long, ſtraight, and ſomewhat hiſpid point. *fig.* 8.

THE antient Botaniſts always conſidered the wild and the manured Teaſel as two diſtinct ſpecies, and 'till the time of *Linnæus* but one opinion prevailed on the ſubject, that great Botaniſt too haſtily concluded that the *Dipſacus fullonum* was only a variety of the *ſylveſtris*, ſome few have implicitly followed that opinion, but *Haller* and *Jacquin* diſtinguiſhed by their nice diſcernment and accurate deſcriptions unite in conſidering the *ſylveſtris* as a ſpecies totally diſtinct from the *fullonum*: in the manured Teaſel the leaves of the Involucrum are ſhort and horizontally extended, in the wild one they are long and encircle the head, the Paleæ in the former are always hooked at the extremity, in the latter never, tho' cultivated, many other diſtinctions will be pointed out when we give the hiſtory and manner of cultivating the manured Teaſel.

This ſpecies grows very commonly on the edges of paſtures, in uncultivated places, by road ſides, and flowers from July to September.

The water collected in the baſon form'd by the union of the leaves towards the bottom of the ſtalk is ſaid to cure warts on the hands if ſeveral times waſhed with it, and hence RAY conjectures this plant might have received its name of *Labrum Veneris*.

Cattle in general even the Aſs appear to avoid it; as is ſhewn by the dried ſtems and heads which remain all the winter, but there is a ſmall Moth about twice the ſize of the *Euonymella*, ſpeckled with black, which finds its way into this formidable plant, and makes a comfortable and ſecure domicilium of its ſpinous head. vid. *Mouſet Theat. Inſect.* p. 256. *Raii catal. plant. circa Cant.* p. 45.

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Dipsacus sylvestris.

Potentilla Anserina

POTENTILLA ANSERINA. SILVER-WEED.

POTENTILLA *Lin. Gen. Pl.* ICOSANDRIA POLYGYNIA
Cal. 10. fidus. *Petala* 5. *Sem.* ſubrotunda, nuda, receptaculo parvo exſucco affixa.
Raii. Syn. Gen. 25. HERBÆ SEMINE NUDO POLYSPERMÆ.
POTENTILLA *Anſerina* foliis pinnatis ſerratis, caule repente, pedunculis unifloris. *Lin. Syſt. Vegetab* p. 396. *Spec. Pl. p.* 710. *Fl. Suec. n.* 452.
FRAGARIA caule repente, foliis pinnatis ſerratis, ſubtus tomentoſis, petiolis unifloris. *Haller. hiſt.* 1126.
POTENTILLA *Anſerina. Scopoli. Fl. Carn.* n. 615.
POTENTILLA *Bauhin. pin.* 321. *Park.* 593.
ARGENTINA *Gerard. emac.* 993.
PENTAPHYLLOIDES Argentina dicta *Raii. Syn.* p. 256. Wild Tanſy, Silver-weed.
Hudſon Fl. Angl. ed. 2. *p.* 222.
Lightfoot Fl. Scot. p. 268.
Oeder. Fl. Dan. t. 544.

RADIX perennis, ramoſa, extus nigro fuſca ſeu albida pro ratione ætatis, fibrilloſa, deſcendens.	ROOT perennial, branched, externally of a dark brown or whitiſh colour according to its age, furniſhed with ſmall fibres, and penetrating deep.
CAULES ſeu potius flagellæ, plures, in longum extenſæ, teretes, geniculatæ, rubicundæ, pubeſcentes, repentes.	STALKS or rather runners, ſeveral extended to a conſiderable length, round, jointed, reddiſh, downy and creeping.
FOLIA ſubtus villoſa, albido-cinerea, ſupra pubeſcentia, viridia, ſæpe etiam villoſa, cinerea, petiolata, pinnata cum impari: foliolis ſeſſilibus, oppoſitis, ovalibus, inciſo-ſerratis; quorum inferiora ſenſim minora; radicalia longius petiolata, procumbentia.	LEAVES hoary on the under ſide, of a whitiſh aſh-colour, on the upper ſide downy, and green, though ſometimes alſo hoary and ſilvery, ſtanding on footſtalks, pinnated, with an odd one at the extremity; the ſmall leaves ſeſſile, oppoſite, oval, deeply cut in on the edge; the lowermoſt gradually the ſmalleſt; the radical ones ſtanding on longer footſtalks than the others and procumbent.
STIPULÆ parviuſculæ, ovales, acutæ, in ipſo petiolo communi inter paria foliolorum, ſuperne ſeſſiles, oppoſitæ, integerrimæ, ſubtus pariter villoſæ.	STIPULÆ ſmall, oval, and pointed, placed on the common footſtalk itſelf, betwixt each pair of the ſmall leaves, above ſeſſile, oppoſite, entire, underneath hoary alſo.
PETIOLI villoſi, ſupra plani, baſi vagina concava, membranacea, tenera, pubeſcente, in petiolum utrinque decurrente.	LEAF-STALKS villous, flat on the upper ſide, forming a ſheath at the bottom, which is hollow, membranous, tender, downy, running down each ſide of the leaf ſtalk.
VAGINÆ caulinæ, h. e ſtipulæ, ad genicula caulis ſolitariæ, apice bifidæ, ſæpe multifidæ, ferentes foliolum oblongum dentatum.	SHEATHS of the ſtalks or rather the ſtipulæ of the runners, are placed ſingly at the joints, bifid and often multifid at top, bearing an oblong indented ſmall leaf.
FLORES pedunculati, ex vaginis caulis ſtipulaceis, ſolitarii.	FLOWERS ſtanding on footſtalks, proceeding ſingly from the joints of the runners.
PEDUNCULI teretes, villoſi, uniflori, erecti.	FLOWER-STALKS round, villous, upright, ſupporting one flower.
CALYX: PERIANTHIUM monophyllum, villoſum, 10. fidum: laciniis ovatis, imbricatis, patenti reflexis; quarum 5 interiores integræ, acutiuſculæ, baſi luteſcentes; exteriores 5 obtuſiuſculæ, inciſæ. *fig.* 1.	CALYX: a PERIANTHIUM of one leaf, villous, divided into 10 ſegments, which are ovate, the edges laying one over the other, ſpreading, and ſomewhat turned back, the 5 innermoſt are entire, rather pointed, yellowiſh at the baſe, the outermoſt bluntiſh and jagged *fig.* 1.
PETALA quinque, lutea, ovata, obtuſa, ſeſſilia, calyci inſerta. *fig.* 2.	PETALS five, of a yellowiſh colour, ovate, obtuſe, ſeſſile, twice the length of the calyx, very much expanded, and inſerted into the Calyx. *fig.* 2.
STAMINA: FILAMENTA plurima, ſubulata, lutea, calyci inſerta, erecta; ANTHERÆ cordatæ, obtuſæ, erectæ, utrinque planæ. *fig.* 3.	STAMINA: numerous FILAMENTS, tapering, yellow, inſerted into the Calyx, upright; ANTHERÆ heartſhaped, blunt, upright, flat on both ſides. *fig.* 3.
PISTILLUM: GERMINA plurima, ovata, obuſa, alba, villo receptaculi circumdata; STYLI ſubulati, germinis lateri adnati, luteſcentes, ſtaminibus breviores, STIGMATA truncata. *fig.* 4. 5.	PISTILLUM: GERMINA numerous, ovate, obtuſe, white, ſurrounded by the hairs, of the receptacle; STYLES tapering, growing out of the ſide of the germen, of a yellowiſh colour, ſhorter than the ſtamina; STIGMATA truncated. *fig.* 4. 5.
RECEPTACULUM barbatum.	RECEPTACLE hairy.

FEW plants render themſelves more conſpicuous by the whiteneſs of their leaves than the *Potentilla Anſerina*, indeed its old name of *Argentina* was derived from this very circumſtance; it muſt be remark'd however that in this particular it is ſubject to much variation, the leaves being ſometimes ſilvery on both ſides, and ſometimes entirely green, but it is moſt commonly found with the upper ſide of the leaves green, and the under ſide ſilvery; the more clayey the ſoil, the whiter the leaves are generally found to be.

It is a plant which thrives moſt in moiſt ſituations, eſpecially if the ſoil be clayey, and the water apt to ſtagnate on it, in ſuch ſituations it may be found almoſt every where about London, flowering from July to September.

RAY informs us on very reſpectable authority that the Boys about *Settle* in Yorkſhire, call the roots of theſe plants by the name of *Moors*, and that in the winter ſeaſon they dig them up and eat them, and that he himſelf had been a witneſs to their being turned up and greedily devoured by ſwine—it deſerves the conſideration of the farmer how far theſe animals may be render'd uſeful in this reſpect, not as to this plant only, but many others which are either noxious or uſeleſs.

Its medicinal virtues are wholly out of repute.

SEDUM TELEPHIUM ORPINE.

SEDUM *Lin. Gen. Pl.* DECANDRIA PENTAGYNIA.

Cal. 5-fidus. *Cor.* 5-petala. *Squamæ* nectariferæ 5 ad baſin germinis. *Caps.* 5.

Raii Syn. Gen. 17. HERBÆ MULTISILIQUÆ SEU CORNICULATÆ.

SEDUM foliis planiuſculis ſerratis, corymbo folioſo caule erecto. *Lin. Syſt. Vegetab.* p. 358. *Sp. Pl.* 616. *Fl. Suecic,* n. 400.

SEDUM androgynum foliis confertis, ſerratis, floribus denſe umbellatis. *Haller. Hiſt.* 954.

SEDUM *Telephium.* *Scopoli Fl. Carniol.* p. 323.

TELEPHIUM vulgare. *Bauhin. Pin.* 287.

ANACAMPSEROS, vulgo Faba craſſa. *J. B.* III. 681.

TELEPHIUM ſeu craſſula major vulgaris. *Park.* 726.

CRASSULA ſeu Faba inverſa *Ger.* 416. *Raii Syn.* p. 269. Orpine or Live long.

Hudſon. Fl. Angl. ed. 2. p. 195.

RADIX perennis, tuberoſa.	ROOT perennial and tuberous.
CAULES plurimi ſimul enaſcuntur, pedales, bipedales, et ultra, erecti, ſimplices, teretes, ſolidi, rubicundi, et ſæpe rubro punctati.	STALKS many, growing up together, from one to two feet high, and upwards, upright, unbranched, round, ſolid, reddiſh, and often dotted with red.
FOLIA ſparſa, conferta, erecta, ſeſſilia, ovata, dentata idque varie, glabra, carnoſa, glauca.	LEAVES placed on the ſtalk ſo as nearly to cover it, in no regular order, upright, ſeſſile, ovate, indented and that variouſly, ſmooth, fleſhy, and of a blueiſh green colour.
FLORES in ſummis caulibus et ramulis (in quos ſummi caules dividuntur) in umbellas denſas digeſti, ſaturate purpurei, nobiſcum rariſſime albi.	FLOWERS placed on the tops of the ſtalks and branches (into which the tops of the ſtalks divide) in cloſe umbells, of a deep purple colour, very rarely white with us.
CALYX: PERIANTHIUM minimum, carnoſum, quinquefidum, laciniis acutis. *fig.* 1.	CALYX: a PERIANTHIUM, very minute, and fleſhy, the ſegments pointed. *fig.* 1.
COROLLA: PETALA quinque, lanceolata, acuminata, plana, ſuperne purpurea, ſubtus albentia. *fig.* 2.	COROLLA: five lanceolate petals, running out to a long point, flat, purple above, and whitiſh underneath. *fig.* 2.
STAMINA: FILAMENTA decem, ſubulata, longitudine corollæ, ANTHERÆ ſubrotundæ, purpuraſcentes. *fig.* 3.	STAMINA: ten FILAMENTS tapering, the length of the corolla; ANTHERÆ roundiſh, and ſomewhat purple. *fig.* 3.
PISTILLUM: GERMINA quinque, oblonga, deſinentia in ſtylos tenuiores, coloratos; STIGMATA minima. *fig.* 4.	PISTILLUM: five GERMINA, of an oblong ſhape, terminating in five, ſlender, coloured ſtyles; STIGMATA, very minute. *fig.* 4.
PERICARPIUM: CAPSULÆ quinque, acuminatæ, erectæ. *fig.* 5.	SEED-VESSEL: five, acuminated, upright CAPSULES. *fig.* 5.
SEMINA plurima, minima.	SEEDS numerous and very ſmall

Of our Engliſh *Stonecrops*, this is the only one that has flat leaves, and conſequently is diſtinguiſhed with the utmoſt facility; it partakes however of the fleſhy nature of the others.

It is a beautiful plant both in its foliage and flowers, and being eaſily cultivated, is met with in moſt gardens, where it will often grow a yard high.

It is ſaid to vary in its leaves and bloſſoms, the former being ſometimes found entire at the edge, and the latter of a white colour.

I have found it wild in many places about London, but moſt plentifully in the vicinity of *Charlton* and *Shooter's Hill*; it grows among the herbage on the confines of woods and flowers in July and Auguſt.

LINNÆUS informs us that the Caterpillar of the *Phalæna alpicola* feeds on its leaves.

Sedum Telephium.

AGROSTEMMA GITHAGO. COCKLE.

Agrostema Githago

AGROSTEMA GITHAGO. COCKLE.

AGROSTEMA *Lin Gen. Pl.* DECANDRIA PENTAGYNIA.

Cal. 1-phyllus, coriaceus. *Petala* 5 unguiculata: *Limbo* obtuſo, indiviſo. *Capſ.* 1-locularis.

Raii Syn. Gen. 24 HERBÆ PENTAPETALÆ VASCULIFERÆ.

AGROSTEMA *Githago* hirſuta, calycibus corollam æquantibus, petalis integris nudis. *Lin. Syſt. Veg.* p. 361. *Sp. Pl.* 624. *Fl. Suecic.* n. 407.

LYCHNIS calycibus longiſſime caudatis. *Haller. Hiſt.* 926.

LYCHNIS *Githago. Scopoli Fl. Carn.* n. 527.

LYCHNIS ſegetum major. *Bauh.* p. 204.

PSEUDO-MELANTHIUM *Ger-emac.* 1087.

LYCHNOIDES ſegetum ſive Nigellaſtrum. *Park.* 632. *Raii Syn.* 338. Cockle.

Hudſon Fl. Angl. ed. 2. p. 198.

Lightfoot Fl. Scot. p. 238.

Oeder. Fl. Dan. t. 576.

RADIX annua.	ROOT annual.
CAULIS erectus, bipedalis, teres, fiſtuloſus, hirſutus, ſuperne ramoſus.	STALK upright, about two feet high, round, hollow, hirſute, branched at top.
FOLIA oblongo-lanceolata, carinata, baſi connata, utrinque hirſuta, pilis ad baſin folii longioribus.	LEAVES of an oblong lanceolate ſhape, keel'd, uniting at the baſe, hairy on both ſides, the hairs at the baſe of the leaves longeſt.
FLORES ſolitarii, ſpecioſi, purpurei.	FLOWERS ſtanding ſingly on the tops of the ſtalks, ſhowy and purple.
CALYX: PERIANTHIUM monophyllum, quinquefidum, profunde ſulcatum, anguloſum, piloſum, laciniis lanceolatis, ſubnudis, carinatis, corollâ longioribus.	CALYX: a PERIANTHIUM of one leaf, divided into five ſegments, of a hard ſubſtance, deeply grooved, angular and hairy, the ſegments lanceolate, ſlightly hairy, with a prominent midrib, and longer than the corolla.
COROLLA: PETALA quinque, magna, ſpecioſa, purpurea, obcordata, baſi albida, venis paucis ſaturate viridibus interrupte notatis; *Unguis* ſublinearis, longitudine fere limbi. *fig.* 1.	COROLLA: five PETALS, large, ſhowy, of a purple colour, and inverſely heart-ſhaped, the baſe whitiſh, marked with a few interrupted veins of a deep green colour; *Claw* ſomewhat linear, almoſt the length of the limb. *fig.* 1.
STAMINA: FILAMENTA decem, ſubulata, quinque ad, baſin petalorum inſerta, quinque ſeriora intra petala locata: ANTHERÆ pallide purpureæ, ſubſagittatæ. *fig.* 2. 3.	STAMINA: ten FILAMENTS, tapering, five inſerted into the baſe of the petals, and five later ones placed betwixt the petals; ANTHERÆ of a pale purple colour, and ſomewhat arrow-ſhaped. *fig.* 2. 3.
PISTILLUM: GERMEN ſubrotundo-conicum, viride, glabrum: STYLI quinque, filiformes, albidi, piloſi, erecti, apicibus paululum reflexis; STIGMATA ſimplicia. *fig.* 4. 5.	PISTILLUM: GERMEN of a roundiſh conical ſhape, ſmooth, and of a green colour; STYLES five, thread-ſhaped, whitiſh, hairy, upright, the tips bending a little back; STIGMATA ſimple. *fig.* 4. 5.
PERICARPIUM: CAPSULA magnitudine fere glandis, calyce exſiccato tectum, ore quinquedentato, lineis decem elevatis notatum. *fig.* 6.	SEED-VESSEL; a CAPSULE almoſt the ſize of an acorn, covered with its dried calyx, having ten ribs, the mouth ſplitting into five teeth. *fig.* 6.
SEMINA plurima, majuſcula, angulata, eleganter exaſperata. *fig.* 7.	SEEDS numerous, largiſh, angular, with a ſurface like ſhagreen. *fig.* 7.

The Cockle is a very common plant in moſt Corn-fields about London and elſewhere; it flowers in June and July.

Like the red Poppy it contributes to ornament our fields, but is rarely found in gardens.

A miller informed me he never wiſhed to to ſee any of it among the corn he ground, as it had a very great tendency to clog his mill-ſtones.

The ſeeds being large and mealy, probably afford food to ſeveral ſorts of birds.

Its medical virtues, highly extolled by former writers, are diſregarded in the preſent practice.

ANTIRRHINUM SPURIUM. ROUND-LEAVED FLUELLIN.

ANTIRRHINUM *Lin. Gen. Pl.* DIDYNAMIA GYMNOSPERMIA.

Cal. 5. phyllus. *Corollæ* baſis deorſum prominens, nectarifera. *Capſula* 2-locularis.

Raii Syn. Gen. 18. HERBÆ FRUCTU SICCO SINGULARI, FLORE MONOPETALO.

ANTIRRHINUM *ſpurium* foliis ovatis alternis, caulibus procumbentibus. *Lin. Syſt. Vegetab.* p. 464. *Sp. Pl.* 851.

ANTIRRHINUM caule procumbente, foliis villoſis, ovatis, imis conjugatis, ſuperioribus alternis. *Haller. Hiſt. p.* 771.

ANTIRRHINUM *ſpurium. Scopoli Fl. Carniol.* 771.

ELATINE folio ſubrotundo. *Bauhin pin.* 252. *Park.* 533.

VERONICA fœmina Fuchſii ſeu Elatine *Ger. em.* 625.

LINARIA Elatine dicta folio ſubrotundo.

Raii Syn. p.* 282. Round-leaved Female Fluellin.

Hudſon. Fl. Angl. ed. 2. *p.* 272.

The *Antirrhinum ſpurium* bears ſo great an affinity in its habit and fructifications (*vid. fig.* 1, 2, 3.) to the *Elatine*, that it would be ſuperfluous to deſcribe it minutely; it is ſufficiently diſtinguiſhed from that plant by its leaves alone, which in this ſpecies are always round, in that haſtate, at leaſt thoſe of the ſtalk, for in both ſpecies the leaves next the root are roundiſh and generally indented; of the two the *ſpurium* is the largeſt plant.

Although Linnæus has given it the name of *ſpurium*, there is no reaſon to ſuppoſe it the ſpurious offspring of the *Elatine*, as the two plants generally grow ſeparate. About *Alton*, in *Hampſhire*, the *ſpurium* abounds in many corn fields, without the leaſt mixture of the *Elatine*; and about *Coomb-wood*, in *Surry*, the *Elatine* may be found in plenty, without the leaſt traces of the *ſpurium*: while in ſome counties they grow promiſcuouſly in the ſame field.

The round-leaved is by far the ſcarceſt plant near town; I found it laſt July tolerably plentiful and in bloſſom, in a corn field betwixt *Beckenham* and *Shirley Common.*

Antirrhinum spurium

Avena flaveſcens.

AVENA FLAVESCENS. YELLOW OAT GRASS.

AVENA *Lin. Gen. Pl.* Triandria Digynia.
Cal. 2-valvis, multiflorus: ariſta dorſali contortâ.
Raii Syn. Gen. 27. Herbæ graminifoliæ flore imperfecto culmiferæ.

AVENA *flaveſcens* panicula laxa, calycibus trifloris brevibus, floſculis omnibus ariſtatis. *Lin. Syſt. Vegetab.* p. 105. *Sp. Pl.* 118. *Fl. Suec.*. p. 103.

AVENA triantha, locuſtis teretibus, calycina gluma altera minima, petiolo villoſo. *Haller. Hiſt.* p. 1497.

GRAMEN avenaceum pratenſe elatius, panicula flaveſcente, locuſtis parvis. *Raii Syn.* p. 407.

GRAMEN avenaceum, ſpica parva flaveſcente, locuſtis parvis. *Moris. Hiſt.* 3. p. 215. ſ. 8. t. 7. fig. 42. *Scheuch. Agroſt.* p. 223. t. 4. f. 18.

Hudſon. Fl. Angl. ed. 2. *p.* 53.

Lightfoot Fl. Scot. p. 106.

Schreber. Gram. tab. 9.

RADIX perennis, culta manifeſte repens.	ROOT perennial, when cultivated manifeſtly creeping.
CULMUS pedalis ad bipedalem, erectus, teres, tribus aut quatuor geniculis purpurascentibus inſtructus, hirſutulus.	STALK from one to two feet high, upright, round, furniſhed with three or four purpliſh joints, and covered with numerous ſhort hairs.
FOLIA plana, ad duas lineas lata, unâ cum vaginâ quæ ſtriata eſt pilis modice longis hirſutula.	LEAVES flat, rarely exceeding two lines in breadth, together with the ſheath which is finely grooved covered with hairs of a moderate length.
PANICULA triuncialis et ultra, dum florent ſpiculæ quam maxime diffuſa, e flavo vireſcens, erecta; poſtea coarctata, ſubſecunda, e flavo-fuſca, ſplendens.	PANICLE three inches and more in length, while the ſpiculæ flower ſpreading as wide as poſſible, of a yellowiſh green colour and upright; afterwards cloſing together, with the ſpiculæ moſtly one way, and becoming of a yellowiſh brown colour and ſhining.
SPICULÆ parvæ, bifloræ, etiam trifloræ et quadrifloræ, floſculis omnibus ariſtatis. *fig.* 3. 4. 9.	SPICULÆ ſmall, containing two, three, or four flowers, all of which have awns. *fig.* 3. 4. 9.
CALYX: *Gluma* bivalvis, valvulis inæqualibus, ſubmembranaceis, acuminatis, alterâ majori *fig.* 1. 2.	CALYX. A *glume* of two valves which are unequal, ſomewhat membranous, pointed, one larger than the other. *fig.* 1. 2.
COROLLA: *Gluma* bivalvis, valvulis inæqualibus, alterâ minore ſubdiaphanâ, membranacea, penitus alba, apice bifida, altera majori tribus aut quatuor nervis viridibus inſignita, concava, bifida, ariſtata. *fig.* 3. 6.	COROLLA. A *glume* of two valves which are unequal, the leaſt ſomewhat tranſparent, membranous, white, and bifid, the largeſt marked with three or four green nerves, hollow, bifid, and furniſhed with an awn. *fig.* 3. 6.
NECTARIUM: *Glumulæ* duæ longitudine germinis, apice laciniatæ. *fig.* 8.	NECTARY: two ſmall *Glumes*, the length of the germen, jagged at top. *fig.* 8.
ARISTA ex dorſo circa medium valvulæ majoris erumpit, in vivâ planta recta, valvulâ duplo fere longior, in ſiccâ recurva. *fig.* 4. 9.	AWN ſpringing from about the middle of the back of the larger valve, in the living plant ſtrait, almoſt twice the length of the valve, in the dried one crooked back. *fig.* 4. 9.
STAMINA: Filamenta tria, capillaria, longitudine florum, Antheræ flavæ, bifurcatæ. *fig.* 5.	STAMINA: three Filaments very fine, the length of the flowers; Antheræ yellow, forked at both ends. *fig.* 5.
PISTILLUM: Germen ovale, nudum; Styli duo, ramoſiſſimi, ex apice germinis, deflexi. *fig.* 7.	PISTILLUM: Germen oval, naked: Styles two, very much branched, growing from the top of the germen, and hanging down. *fig.* 7.
SEMEN oblongum, acuminatum, nudum, valvulâ majori incluſum	SEED oblong, pointed, naked, incloſed in the larger valve.

The term *flaveſcens* has with propriety been given to this ſpecies of *Avena*, as its panicle, eſpecially on cloſing after it has flowered, is of a yellower hue than any of the others, and this is one character which may ſerve to diſtinguiſh it; added to this it is one of the leaſt of the genus, its panicle is finely divided, its ſpiculæ are ſmall, delicate, and generally contain two perfect flowers; and its leaves and ſtalks are *conſtantly hairy*: cultivated in a garden, it becomes larger in every reſpect, and the ſpiculæ contain three or more flowers.

We may remark that the Ariſta or Beard in the living plant is ſtrait, but crooked in dried ſpecimens.

Though not ſo common as the *Avena elatior*, it is to be found in moſt paſtures, eſpecially ſuch as are elevated, in ſome meadows, and frequently on graſſy banks by the road ſide, it flowers about the end of June.

Mr. Stillingfleet has not enumerated this graſs among his valuable ones, yet it is more deſerving of that diſtinction than ſome of thoſe he has figured, eſpecially the *mountain* and *ſilver Hair-graſs*, the latter of which is a trifling annual with reſpect to agriculture, unworthy of the Farmer's notice: the yellow Oat-graſs is a perennial, forms in many counties a principal part of the fineſt paſturage on the downs, and in divers meadows contributes to the goodneſs as well as greatneſs of the crop. As to time, it is not ſo early as many of the *Poas*, nor is it ſo late as ſome of the *Agroſtis* tribe; on the whole, from the remarks I have made on it in its wild and cultivated ſtate, I would recommend it as one of the few out of the many Engliſh graſſes worth the husbandman's attending to.

STACHYS PALUSTRIS. CLOWN'S ALLHEAL.

STACHYS *Lin. Gen. Pl.* DIDYNAMIA GYMNOSPERMIA.

Corollæ lab. ſuper. fornicatum, lab. inferius lateribus reflexum, intermedia majore emarginata. STAMINA deflorata verſus latera reflexa.

Raii Syn. Gen. 14. SUFFRUTICES ET HERBÆ VERTICILLATÆ.

STACHYS *paluſtris* verticillis ſubſexfloris, foliis lineari lanceolatis ſemiamplexicaulibus ſeſſilibus. *Lin. Syſt. Vegetab. p.* 447. *Sp. Pl.* 811. *Fl. Suec. n.* 528.

STACHYS foliis hirſutis, elliptico-lanceolatis, breviter petiolatis, verticilis ſpicatis. *Haller Hiſt. n.* 257.

STACHYS *paluſtris.* *Scopoli Fl. Carn. n.* 707.

STACHYS paluſtris fœtida. *Bauh pin.* 236.

SIDERITIS Anglica ſtrumoſa radice. *Park.* 587.

PANAX coloni. *Gerard. emac. p.* 1005. *Raii Syn. p.* 242. Clown's Allheal.

Lightfoot Fl. Scot. p. 313.

Hudſon. Fl. Angl. ed. 2. *p.* 259.

RADIX perennis, repens, ſtolonibus plurimis, albis, per terram in longum extenſis, quorum extremitates ſub finem æſtatis in tubera intumeſcunt.

CAULIS bipedalis, erectus, ramoſus, fiſtuloſus, quadrangularis, lateribus planiuſculis, angulis hiſpidulis, pilis deorſum verſis, geniculatus, geniculis piloſis, purpureis.

RAMI cauli ſimiles.

FOLIA oppoſita, ſeſſilia, ſubamplexicaulia, lanceolata, patentia, ſerrata, ſubrugoſa, nervo medio ſubtus ſcabriuſculo.

FLORES verticillati, ſpicati, pallide purpurei, verticillis decemfloris, octo in circulum diſpoſitis, uno utrinque ſuperimpoſito.

SPICA ſpithamæa, erecta.

BRACTEÆ ovato-acuminatæ, integerrimæ, hirſutæ, trinerves, deflexæ.

CALYX: PERIANTHIUM monophyllum, tubulatum, quinquefidum, hirſutulum, purpuraſcens, lineis decem elevatis notatum, ore patulo, dentibus ſubæqualibus, acuminatis. *fig.* 1.

COROLLA monopetala, ringens, *tubus* breviſſimus, cylindraceus, pilis interne coronatus, *faux* oblonga, compreſſiuſcula, ſubincurvata, punctis duobus prominulis ad baſin labii ſuperioris, *labium* ſuperius erectum, ſubovatum, fornicatum, emarginatum, ſuperne viſcidum, *labium* inferius majus, trifidum, albo et purpureo pulchre variegatum, lacinulâ intermedia maxima, concava. *fig.* 2. 3. 4.

STAMINA: FILAMENTA quatuor, quorum duo paulo breviora, ad lentem ſubpiloſa, medio craſſiora, rubicunda, nitida; ANTHERÆ e purpureonigricantes; POLLEN album. *fig.* 5. 6.

PISTILLUM: GERMEN quadripartitum; STYLUS filiformis longitudine ſtaminum; STIGMA bifidum, acutum. *fig.* 7. 8. 9.

ROOT perennial, creeping, ſhoots numerous, white, extending under ground to a great length, their extremities at the cloſe of the ſummer becoming tuberous.

STALK two feet high, upright, branched, hollow, four corner'd, the ſides flattiſh, the corners ſomewhat hiſpid with hairs which turn downward, jointed, the joints hairy, and purple.

BRANCHES like the ſtalk.

LEAVES oppoſite, ſeſſile, ſlightly embracing the ſtalk, lanceolate, ſpreading, ſerrated, ſomewhat wrinkly, the midrib on the under ſide of the leaf roughiſh.

FLOWERS of a pale purple colour, growing in whirls which form a ſpike, in each whirl is ten flowers, eight placed circularly, and one on each ſide above them.

SPIKE ſix or eight inches high.

FLORAL-LEAVES ovate and pointed, entire, hirſute, threerib'd, and turned downward.

CALYX: a PERIANTHIUM of one leaf, tubular, divided into five ſegments, ſlightly hirſute, purpliſh, marked with ten elevated lines, the mouth open, the teeth nearly equal and pointed. *fig.* 1.

COROLLA monopetalous, ringent; *tube* very ſhort, cylindrical, crowned internally with hairs; *mouth* oblong, ſomewhat flattened and a little bent, marked with two prominent dots at the baſe of the upper *lip*; upper *lip* upright, ſomewhat ovate, arched, nicked, and viſcid at top; the lower *lip* larger, divided into three ſegments, beautifully variegated with white and purple, the middle ſegment very large and hollow. *fig.* 2. 3. 4.

STAMINA: four FILAMENTS, two of which are ſomewhat ſhorter than the other two, hairy when magnified, thickeſt in the middle, reddiſh and ſhining; ANTHERÆ, of a purpliſh black colour; POLLEN white. *fig.* 5. 6.

PISTILLUM: GERMEN divided into four parts; STYLE thread ſhaped, the length of the ſtamina; STIGMA bifid, and pointed. *fig.* 7. 8. 9.

GERARD has been extremely laviſh in his praiſes of this plant as a vulnerary, whence it has acquired its name of *Clown's Wound-wort*, or *All-heal.* He mentions the caſe of a labouring man, who in reaping cut a deep gaſh in his leg, which by the application of this herb was preſently healed, and which doubtleſs would have healed equally ſoon from the application of any other ſimple herb, or a little dry lint. In ſound conſtitutions nature often performs wonders in this way, which generally are attributed to the application.

It behoves the Farmer to know it, as it is a very noxious plant in many corn-fields, encreaſing very much by its roots, which towards the cloſe of the ſummer become tuberous at their extremities; it encreaſes alſo by ſeed. Hogs are ſaid by LINNÆUS to be fond of the roots; when the crop is off they may probably be turned into thoſe fields where the plant abounds to great advantage.

It is not confined to corn fields, but is often met with by road ſides, eſpecially in moiſt ſituations. It flowers in July and Auguſt.

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Stachys palustris.

Hypericum Androsæmum.

HYPERICUM ANDROSÆMUM. TUTSAN.

HYPERICUM *Lin. Gen. Pl.* Polyadelphia Polyandria

Cal. 5. partitus, *Petala* 5. *Filamenta* multa, in 5 phalanges baſi connata, *Capſula.*

Raii Syn. Gen. 24. Herbæ pentapetalæ vasculiferæ.

HYPERICUM *Androſæmum* floribus trigynis, fructibus baccatis, caule fruticoſo ancipiti. *Lin. Syſt. Vegetab.* p. 583. *Sp. Pl.* p. 1102.

ANDROSÆMUM maximum fruteſcens. *B. Pin.* 280.

ANDROSÆMUM vulgare. *Park.* 575.

CLYMENUM Italorum. *Ger. emac.* 548.

HYPERICUM maximum Androſæmum vulgare dictum. *Raii Syn.* Tutſan or Park-leaves.

Hudſon Fl. Angl. ed. 2. p. 332.

Lightfoot Fl. Scot. p. 415.

RADIX perennis, craſſa, lignoſa, rubens, fibras longiſſimas emittens.	ROOT perennial, thick, woody, of a reddiſh colour, ſending out very long fibres.
CAULES ſuffruticoſi, ancipites, bipedales et ultra, ramoſi, rubentes, glabri.	STALKS ſomewhat ſhrubby, ſlightly winged, two feet high and upward, branched, of a reddiſh colour and ſmooth.
FOLIA oppoſita, ſeſſilia, ovata, integerrima, lævia, inferne pallidiora, venis plurimis parum extantibus reticulata, per ætatem rubicunda, inferioribus plerumque minoribus.	LEAVES oppoſite, ſeſſile, ovate, entire, ſmooth, paler on the under ſide, reticulated with numerous veins which project but little, becoming through age of a reddiſh or purple colour, the lowermoſt generally the leaſt.
FLORES flavi, pro ratione plantæ parvi, in *Cyma* variè diviſa diſpoſiti.	FLOWERS of a yellowiſh colour, ſmall for the ſize of the plant, diſpoſed in a *Cyma* variouſly divided.
CALYX: Perianthium quinquepartitum, laciniis ovatis, obtuſis, ſubnervoſis, inæqualibus, erectis, demum reflexis.	CALYX: a Perianthium deeply divided into five ſegments, which are ovate, obtuſe, ſomewhat rib'd, unequal, upright, finally turned back.
COROLLA: Petala quinque, ovata, obtuſa, ſubæqualia, calyce paulo longiora, patentia, concaviuscula, apicibus paululum inflexis, decidua	COROLLA: five Petals, ovate, obtuſe, nearly equal, a little longer than the calyx, ſpreading, ſomewhat hollow, the tips bending a little inward, deciduous.
STAMINA: Filamenta plurima, ultra quadraginta, corollâ longiora; Antheræ parvæ, ſubrotundæ.	STAMINA: Filaments numerous, more than forty, longer than the corolla; Antheræ ſmall and roundiſh
PISTILLUM: Germen ſubrotundum, nitidum, flaveſcens; Styli tres, longitudine germinis, erecti; Stigmata parva, rotundata.	PISTILLUM: Germen roundiſh, ſhining, yellowiſh; Styles three, the length of the germen, upright; Stigmata, ſmall and roundiſh.
PERICARPIUM: Capsula ovato-rotundata, primo baccæformis, e flavo vireſcens, dein ruberrima, demum nigricans, exſucca, trilocularis, ſeminibus plurimis minimis referta	SEED-VESSEL; a Capsule of a roundiſh egg-ſhape, at firſt aſſuming the appearance of a berry of a yellowiſh green colour, afterwards of a bright red colour, laſtly blackiſh, having three cavities which are filled with numerous ſmall ſeeds.

The French call this plant *Toute ſaine, Allheal, (vide Tourn. Hiſt. des Pl.)* whence as Parkinson obſerves, we have evidently borrowed our Engliſh name of *Tutſan.* They appear to have been equally fond of attributing vulnerary qualities to plants as our countryman Gerard, but perhaps on no better grounds, the *Tutſan* and the *Allheal* being now equally neglected. Its other name of *Park-leaves,* by which it is leſs frequently called, it has doubtleſs acquired from being commonly found in Parks.

We may remark of the *Androſæmum,* that neither Haller, Linnæus, Jacquin, Scopoli, or Œder enumerate it in their reſpective Flora's.

In many parts of *England* it is by no means an uncommon plant; it is chiefly found in or near Woods. About London all our *Hypericums* abound more than this, which I have met with in one wood only, viz. the *Oak* of *Honour* Wood, near *Peckham Rye,* adjoining *Norwood.* It flowers in July and Auguſt, and ripens its ſeed-veſſels, which have much the appearance of berries in September.

It is not uncommon in Gardens.

VIOLA PALUSTRIS. BOG VIOLET.

VIOLA *Lin. Gen. Pl.* SYNGENESIA MONOGAMIA.

Cal. 5-phyllus. *Cor.* 5-petala, irregularis, poſtice cornuta. *Caps.* ſupera 3-valvis, 1-locularis.

Raii Syn. Gen. 24. HERBÆ PENTAPETALÆ VASCULIFERÆ.

VIOLA acaulis, foliis reniformibus. *Lin. Syſt. Vegetab. p.* 668. *Sp. Pl. p.* 1324. *Fl. Suecic. n.* 786. *Haller. hiſt. n.* 560.

VIOLA paluſtris rotundifolia glabra. *Moris. hiſt.* 2. *p.* 475. *ſ.* 5. *t.* 35. *f.* 5. *Plot. Ox.* 144. *t.* 9. *f.* 2. *Raii Syn. p.* 364.

Hudſon Fl. Angl. ed. 2. *p.* 379.

Lightfoot Fl. Scot. p. 506.

Oeder Fl. Dan. t 83.

RADIX perennis, repens, albida, dentata, hinc inde gemmis albis inſtructa, plurimis fibrillis ramoſis capillata.	ROOT perennial, creeping, whitiſh, toothed, here and there furniſhed with white buds, and abundantly ſupplied with branched fibres.
STIPULÆ radicales plurimæ, ovato-acutæ, ſerrulatæ.	STIPULÆ next the root numerous, ovate, pointed, and ſlightly ſawed.
PETIOLI glabri, ſemicylindracei, interne concavi, ad lentem viſi punctis minutiſſimis purpureis notati.	LEAF-STALKS ſmooth, ſemicylindrical, internally hollow, view'd with a glaſs appearing to be finely dotted with purple.
FOLIA ſubreniformia, tenera, nitida, crenata, venoſa, ſubtus haud infrequenter purpuraſcentia.	LEAVES ſomewhat kidney-ſhaped, tender, ſhining, notched, veiny, on the under ſide frequently purpliſh.
PEDUNCULI radicales, uniflori, petiolis duplo longiores, ſubtetragoni.	FLOWER-STALKS ſpringing from the root, twice the length of the leaf-ſtalks, ſomewhat quadrangular
BRACTEÆ duo, lanceolatæ, oppoſitæ, ad baſin ſerrulatæ, infra medium pedunculi poſitæ.	FLORAL-LEAVES two, lanceolate, oppoſite, finely ſawed at the baſe, and placed below the middle of the flower-ſtalk.
FLORES parvi, pallide purpurei.	FLOWERS ſmall, of a pale purple colour.
CALYX: PERIANTHIUM parvum, petalis duobus ſuperioribus fere occultum, pentaphyllum, foliolis oblongis, obtuſis, ſuperioribus apice recurvis. *fig.* 1.	CALYX: a PERIANTHIUM, ſmall and almoſt hid by the two uppermoſt petals, compoſed of five leaves, which are oblong, obtuſe, the uppermoſt turn'd back at top. *fig.* 1.
COROLLA: PETALA quinque, pallide purpurea, duobus ſuperioribus deorſum flexis, longitudine fere calcaris nectarii, petala lateralia ſubtortuoſa, ſtria unica ſimplici notata, baſi barbata, *fig.* 2. infima venis purpureis ramoſis pulchre picta, in calcar breve obtuſum poſtice excurrente. *fig.* 3.	COROLLA five PETALS, of a pale purple colour, the two uppermoſt bent back, almoſt the length of the ſpur of the nectary, the ſide petals ſomewhat twiſted, marked with one ſimple ſtreak, and bearded at the bottom, the lowermoſt beautifully painted with branched veins of a purple or reddiſh colour, running out backward into a ſhort blunt ſpur. *fig.* 2. 3.
STAMINA: FILAMENTA quinque breviſſima; ANTHERÆ biloculares, in tubum vix coaleſcentes, membrana aurantiaca terminatæ. *fig.* 4. *auct.*	STAMINA: five FILAMENTS very ſhort, ANTHERÆ bilocular, ſcarcely united in a tube, terminated by an orange colour'd membrane. *fig.* 4. magnified.
PISTILLUM: GERMEN ſubovatum; STYLUS baſi curvatus, ſuperne incraſſatus, antheris longior; STIGMA nudo oculo bifidum apparet; *fig.* 5. armato ſicut ad. *fig.* 6.	PISTILLUM: GERMEN ſomewhat ovate; STYLE crooked at bottom, thicken'd at top, longer than the antheræ; STIGMA to the naked eye bifid. *fig.* 4. when magnified appearing as at *fig.* 6.
PERICARPIUM: CAPSULA oblonga, trigona, trivalvis.	SEED-VESSEL an oblong, three-corner'd CAPSULE of three valves.
SEMINA plurima, ſubrotunda.	SEEDS numerous and roundiſh.

IT is in Bogs only that we find the *Viola paluſtris*, the leaſt ſhowy of all our Engliſh Violets, and in ſuch ſituations it generally abounds, on the boggy part of *Shirley Common* near *Croydon*, it may be found in flower in April and May.

It is diſtinguiſhed from the other ſpecies by the peculiarity of its place of growth, the greater roundneſs of its leaves, the paleneſs of its flowers, and the extraordinary form of its ſtigma, *vid. pl. fig.* 6. In its œconomy it reſembles the *Viola odorata*, *hirta*, &c. producing ripe ſeeds without perfect bloſſoms, and that in a greater quantity and for a longer continuance than any of the others.

A Violet with red ſtriped bloſſoms is mentioned by PARKINSON, under the name of *Viola rubra ſtriata Eboracenſis* which is conſidered by Mr. RAY and later writers, as only a variety of the preſent plant.

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Viola palustris.

Fritillaria Meleagris.

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FRITILLARIA MELEAGRIS. COMMON FRITILLARY.

FRITILLARIA *Lin. Gen. Pl.* HEXANDRIA MONOGYNIA.

Cor. 6. petala, campanulata, ſupra ungues cavitate nectarifera. *Stam.* longitudine corollæ.

Raii. Syn. Gen. 26. HERBÆ RADICE BULBOSA PRÆDITÆ.

FRITILLARIA *Meleagris* foliis omnibus alternis, caule unifloro. *Lin. Syſt. Vegetab. p.* 269. *Sp. Pl.* p. 436. *Fl. Sueeic. n.* 283.

FRITILLARIA caule paucifloro foliis caulinis gramineis alternis. *Haller. hiſt. n.* 1235.

FRITILLARIA *Meleagris. Scopoli Fl. Carn. n.* 405.

FRITILLARIA præcox purpurea variegata. *Bauh. pin.* 64.

FRITILLARIA vulgaris. *Parkinſon. Parad.* 40.

FRITILLARIA variegata. *Gerard. emac.* 149. *Raii. hiſt.* p. 1106. *Hudſon. Fl. Angl. ed.* 2. p. 144.

RADIX: Bulbus magnitudine nucis avellanæ, ſolidus, albus, ſubrotundus, in plures ſeparabilis, bulbo precedentis anni, marcido, rugoſo in thecâ quaſi incluſus.	ROOT: a bulb about the ſize of a hazel nut, ſolid, white, roundiſh, diviſible into ſeveral, incloſed by the withered, wrinkly bulb of the preceding year as in a caſe.
CAULIS ſpithamæus et altior, erectus, teres, ſimplex, lævis, glaucus, haud infrequenter purpuraſcens.	STALK from half a foot to a foot in height, upright, round, ſimple, glaucous, and not unfrequently purpliſh.
FOLIA caulina quatuor, aut quinque, alterna, ſemiamplexicaulia, ſublinearia, inferne rotundata, ſuperne concava, ſubtortuoſa, glauca.	LEAVES of the ſtalk about four or five in number, alternate, half embracing the ſtalk, ſomewhat linear, round on the under and hollow on the upper ſide, ſomewhat twiſted and glaucous.
FLOS in ſummitate caulis unicus, magnus, pendulus, primum ovato-pyramidalis, tum campanulatus.	FLOWER: a ſingle bloſſom on the top of the ſtalk, large, pendulous, firſt ſomewhat pyramidal, and afterwards bell-ſhaped.
CALYX nullus.	CALYX wanting.
COROLLA: *Petala* ſex, ovato-oblonga, æqualia, albo et purpureo pulchre teſſelata, baſi gibboſa. *fig.* 1.	COROLLA: ſix PETALS, of an oblong ovate ſhape, equal, beautifully checquer'd with purple and white, and gibbous at the baſe. *fig.* 1.
NECTARIUM: fovea ſublinearis, vireſcens, prope baſin cujuſvis petali unde gibbi externi. *fig.* 1.	NECTARY a narrow cavity of a greeniſh colour, near the baſe of each petal, whence the external protuberances. *fig.* 1.
STAMINA: FILAMENTA ſex, ſubulata, lævia, albida, germine duplo longiora; ANTHERÆ oblongæ, ſubcompreſſæ, quadriſulcatæ, mucrone vireſcente instructæ, demiſſo polline duplo breviores; POLLEN flavum. *fig* .2. 3.	STAMINA: ſix FILAMENTS, tapering, ſmooth, whitiſh, twice the length of the germen; ANTHERÆ oblong, flattiſh, with four groves, and a greeniſh point at the top of each, becoming ſhorter by one half on the ſhedding of the POLLEN, which is of a yellow colour. *fig.* 2. 3.
PISTILLUM: GERMEN trigonum, viride; STYLUS teres, pubeſcens, ſuperne paululum incraſſatus, trifidus, laciniis teretibus, divergentibus, interne et externe ad lentem canaliculatis; STIGMATA ſimplicia, villoſa. *fig.* 4. 5.	PISTILLUM: GERMEN ſcarce manifeſtly three corner'd, of a green colour; STYLE round, downy, a little thicken'd above, divided into three ſegments, which are round, diverging, and mark'd both internally and externally with a groove, viſible with a magnifier; STIGMATA ſimple, villous. *fig.* 4. 5.

THE *Fritillaria Meleagris* is one of thoſe plants which have been diſcovered to be indigenous to this country, ſince the time of Mr. RAY; Mr. BLACKSTONE is I believe the firſt who mentions it as growing in *Mawde* Fields near *Riſlip* Common *Middleſex*, plentifully, and in which place it had been obſerved in his time for near ſixty years; Mr. HUDSON deſcribes it as growing in the Meadows betwixt *Mortlake* and *Kew*, alſo near *Endfield*; Mr. CULLUM a very accurate and ingenious Botaniſt at *Bury St. Edmunds*, has ſent me plants which he found plentifully in a wild ſtate near that place, and this ſpring I received information that it was found wild in a wood belonging to Mrs. WILSON, of *Bromley* in *Kent*.

With theſe ſeveral authorities we may, I think with propriety, conclude that it is a real native of this Iſland; it is found in ſimilar ſituations abroad, in *ſylvis et paluſtribus*, vid. JACQUIN *Fl. Auſtr. V.* 5. *Ap. p.* 45.

The bloſſoms before they are fully expanded, bear ſome reſemblance to a ſnake's head, whence they are called by the country people in ſome places *Snake's Heads*, alſo checquer'd *Daffodil* and *Tulip*.

If the ſeaſon be mild they flower in the begining of April, and are out of bloom in a ſhort time.

It is only regarded as an ornamental plant, and as ſuch has long been cultivated in gardens, in which many beautiful varieties are to be met with.

BRYUM SUBULATUM. AWL-SHAPED BRYUM.

BRYUM *Lin. Gen. Pl.* CRYPTOGAMIA MUSCI.

Anthera operculata. *Calyptra* lævis. *Filamentum* e tuberculo terminali ortum.

Raii Syn. Gen. 3. MUSCI.

BRYUM *ſubulatum* antheris erectis ſubulatis, ſurculis acaulibus. *Lin. Syſt. Vegetab. p.* 797. *Sp. Pl. p.* 1581. *Fl. Suec.* n. 991.

BRYUM caule breviſſimo, foliis lanceolatis, capſulis longiſſimis, operculo prælongo. *Haller. hiſt.* 1827.

BRYUM *ſubulatum. Scopoli Fl. Carn.* n. 1304.

BRYUM capſulis longis ſubulatis. *Dill. Muſc.* 350. *t.* 45. *f.* 10.

BRYUM erectis longis et acutis falcatis capitulis, calyptra ſubfuſca, foliis ſerpylli pellucidis. *Raii Syn.* 92. *Vaill. Bot. Par. t.* 25. *f.* 8.

Hudſon. Fl. Angl. ed. 2. *p.* 476.

Lightfoot. Fl. Scot. p. 719.

RADICES nigræ, fibrilloſæ, parum ramoſæ.	ROOTS black, fibrous, a little branched.
CAULES ſubſeſſiles, denſe coacervati, ſimplices vel ramoſi.	STALKS nearly ſeſſile, growing cloſe together, ſimple or branched.
FOLIA ovato-lanceolata, patentia, pellucida, pallide viridia, modice carinata, mucrone brevi terminata, ad lentem viſa. *fig.* 1.	LEAVES ovato-lanceolate, ſpreading, tranſparent, of a pale green colour, moderately keel'd, terminated by a ſhort point, as magnified. *fig.* 1.
PEDUNCULI unciales et ultra, pallide luteſcentes, ſicci contorti, bulbillo præditi oblongo. *fig.* 2.	PEDUNCULES an inch or more in heigth, of a pale yellow colour, twiſted when dry, furniſh'd with an oblong bulb. *fig.* 2.
CAPSULÆ prælongæ, cylindraceæ, ſubaurantiacæ, incurvæ. *fig.* 3, annotinæ rectiores e fuſco-purpureæ, e quarum ore egreditur trunculus ſeu cornu, e ciliis in tubum contortis compoſitum, apice vero liberis. *fig.* 6, 7, 8, 9; Calyptra longitudine fere capſulæ, acuminata. *fig.* 4.	CAPSULES very long, cylindrical, ſomewhat orange coloured and crooked, *fig.* 3; thoſe of the preceding year ſtraighter, of a purpliſh brown colour, from the mouth of which proceeds a little trunk or horn compoſed of the ciliæ twiſted into a tube, but looſe at top. *fig.* 6, 7, 8, 9. *Calyptra* almoſt the length of the capſule, having a long point. *fig.* 4.
OPERCULUM capſulâ duplo brevior, acuminatum. *fig.* 5.	OPERCULUM twice as ſhort as the capſule and pointed. *fig.* 5.

FEW of the Moſſes are ſubject to ſo little variety, or more eaſily diſcovered than the *Bryum ſubulatum*, before it puts forth its capſules we are ſtruck with the broadneſs of its leaves and their ſtar-like expanſion; as it advances the capſules while covered by their Calyptras are unuſually long, pointed, and in general a little bent whence it has acquired the Engliſh name of *Awl-ſhaped*, the capſule in its laſt ſtate after loſing both its Calyptra and Operculum, is peculiarly diſtinguiſhed by the protruſion of a ſubſtance from its mouth, of a whiter colour than the body of the capſule, this ſubſtance when magnified is found to conſiſt of a number of threads or filaments forming a thin ſpiral tube, yet looſe and unconnected at top, ſee *fig.* 7, 8, 9, the tube is formed before the operculum falls off, for its ſpiral line may be obſerved through the tranſparent operculum when it is in a young ſtate: DILLENIUS uſing a ſmall magnifier, has not done juſtice to this very ſingular and curious character.

This Moſs is not uncommon on banks ſurrounding woods, alſo in ſhady lanes; I have obſerved it in great plenty on a bank on the right hand ſide as you enter *Shirley-Common*, paſſing through *Shirley* from *Croydon*, alſo about *Charlton* and *Coombe Woods*.

It produces its Capſules in February and March.

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Bryum subulatum

Papaver Rhœas.

PAPAVER RHOEAS. SMOOTH-ROUND-HEADED POPPY.

PAPAVER *Lin. Gen. Pl.* POLYANDRIA MONOGYNIA.

Cor. 4-petala. *Cal.* 2-phyllus. *Capſula* 1-locularis, ſub ſtigmate perſiſtente poris dehiſcens.

Raii Syn. Gen. 22. HERBÆ VASCULIFERÆ FLORE TETRAPETALO ANOMALÆ.

PAPAVER *Rhœas* capſulis glabris globoſis, caule piloſo multifloro, foliis pinnatifidis inciſis. *Lin. Syſt. vegetab.* p. 407. *Spec. plant.* p. 726. *Fl. Suecic.* n. 468.

PAPAVER foliis ſemipinnatis hiſpidis fructu ovato glabro. *Haller. hiſt. n.* 1064.

PAPAVER *Rhœas Scopoli. Fl. Carn. n.* 648.

PAPAVER *erraticum majus. Bauhin pin.* 171.

PAPAVER *Rhœas. Ger. emac.* 371.

PAPAVER erraticum Rhœas ſive ſylveſtre. *Park.* 397.

PAPAVER laciniato folio, capitulo breviore glabro annuum Rhœas dictum. *Raii Syn.* p. 308. Red Poppy or Corn Roſe.

Hudſon. Fl. Angl. ed. 2. *p.* 230.

Lightfoot. Fl. Scot. p. 269.

RADIX annua, ſimplex, fibroſa.	ROOT annual, ſimple and fibrous.
CAULIS pedalis ad bipedalem, erectus, ramoſus, teres, baſi purpuraſcens, hiſpidulus, pilis baſi bulboſis.	STALK from one to two feet high, upright, branched, round, purpliſh at bottom, ſomewhat hiſpid, the hairs bulboſe at the baſe.
FOLIA ſeſſilia, baſi ſubvaginantia, utrinque hirſuta, pinnatifida, inciſa, laciniis ſeu foliolis inæqualiter dentato ſerratis, dentibus margine revolutis, apice calloſis et ſpinula terminatis.	LEAVES ſeſſile, forming a kind of ſheath at bottom, hairy on both ſides, pinnatifid and jagged, the ſmall leaves into which the large one is divided unequally toothed, or ſawed, each tooth rolled back at the edge, callous at top and terminated by a ſmall ſpine.
PEDUNCULI erecti, uniflori, teretes, hiſpidi, pilis patentibus.	FLOWER-STALK upright, each ſupporting one flower, round, hiſpid, the hairs projecting horizontally.
CALYX: PERIANTHIUM diphyllum, ovatum, hiſpidulum, foliolis concavis, margine membranaceis, deciduis.	CALYX: a PERIANTHIUM of two leaves, ovate, hiſpid, the leaves hollow, membranous on the edge and deciduous.
COROLLA: PETALA quatuor, magna, patentia, inæqualia, coccinea, ad baſin maculâ nigrâ, nitidâ notata.	COROLLA: four petals, large, ſpreading, unequal, of a bright ſcarlet colour, marked at the baſe with a ſhining black ſpot.
STAMINA: FILAMENTA numeroſa, purpurea, capillaria; ANTHERÆ ſubrotundæ, compreſſæ; POLLEN viride. *fig.* 1. 2.	STAMINA: FILAMENTS numerous, purple and very ſlender; ANTHERÆ roundiſh, flatten'd: POLLEN green. *fig.* 1. 2.
PISTILLUM: GERMEN ovatum, truncatum; STYLUS nullus, STIGMA convexum, radiatum; radiis circiter decem purpureis. *fig.* 3.	PISTILLUM: GERMEN ovate, cut off at top; STYLE wanting; STIGMA convex and radiated, rays about ten of a purple colour. *fig.* 3.
PERICARPIUM: CAPSULA ovata, apice truncata, et crenata, lævis, lineis elevatis tot quot ſtigmata notata, ſtigmate plano perſiſtente crenato tecta *fig.* 4.	SEED-VESSEL, ſhape of an egg cut off at top, where it is ſcolloped, ſmooth, mark'd with as many raiſed lines as there are ſtigmata, and covered with the ſtigma which is permanent, flat, and alſo ſcolloped on the edge. *fig.* 4.
SEMINA plurima, minima, ex atro-purpuraſcentia. *fig.* 5.	SEEDS numerous, very minute, of a dark purple colour. *fig.* 5.

WE have growing wild in the neighbourhood of London, four different ſpecies of Poppy that have ſome affinity both in their foliage and flowers to one another, viz. the *Papaver Rhœas* ſmooth-round-headed Poppy, *Papaver dubium* ſmooth-long-headed Poppy, *Papaver hybridum* prickly-round-headed Poppy, and *Papaver Argemone* prickly-long-headed Poppy, of theſe the firſt, which is here figured is by far the moſt common; growing chiefly in Corn-fields, it has acquired generally the name of Corn Poppy, in ſome countries it is diſtinguiſhed by the name of Red-Weed.

A Syrup made from an infuſion of the flowers is uſed by the Apothecary, more for the ſake of the beautiful colour it imparts to the medicine, than from its poſſeſſing any active principle; the Gardener is carefull to cultivate its numerous varieties, while the Farmer is no leſs anxious to root it from his fields, in which it is often ſo predominant as to appear like the real crop.

Although a Corn-field be its moſt uſual place of growth it is neverthele ſs frequently found on dry banks and on walls, and according to ſuch ſituations it varies extremely in its foliage, but conſtantly retains two of its ſtriking characters, viz. the round or rather urn-ſhaped form of its capſules, and the projecting hairs on the flowering ſtem; theſe always diſtinguiſh it from the *dubium* to which it is very nearly allied.

It flowers from June to Auguſt.

AGARICUS OSTREATUS. OYSTER MUSHROOM.

AGARICUS *Lin. Gen. Pl.* CRYPTOGAMIA FUNGI.

Fungus horizontalis, ſubtus lamelloſus.

Raii Syn. Gen. 1. FUNGI.

AGARICUS *oſtreatus* ſubſtipitatus, faſciculato-imbricatus, pileo cinereo obovato, margine involuto, lamellis albidis decurrentibus, baſi ſubanaſtamoſantibus.

AGARICUS *oſtreatus. Jacquin. Fl. Auſtr.* t. 104.

Menſibus Decembri et Januarii e truncis arborum præſertim ſalicis nobiſcum excreſcunt Fungi icone annexâ illuſtrati; plurimi plerumque ſimul erumpunt, imbricatim congeſti, diu manent et demum exſiccantur.	In the months of December and January the Fungi illuſtrated by the annexed figure, grow with us principally out of the trunks of willow trees; they uſually come forth in cluſters heap'd one on another, remain a conſiderable time and finally wither,
STIPES; etſi pileus trunco arboris utplurimum baſi ſuâ adnectitur nihilominus in quibuſdam ſpeciminibus ſtipes ſeu pars ſtipitis magis luculenter apparet, lamellis decurrentibus tecta.	STALK: although the cap is for the moſt part connected to the trunk of the tree by its baſe, yet in ſome ſpecimens the ſtalk or part of a ſtalk more evidently appears, cover'd with the gills which run down it.
PILEUS magnitudine, et forma varius, ſicut in icone, in junioribus convexus, lævis, murinus, cæruleſcens, margine integro, involuto, in ſeneſcentibus planiuſculus ſeu parum concavus, fuſcus, baſi in inferioribus tomento niveo obductâ; caro albiſſima, craſſa, ſubdulcis.	CAP variable both in ſize and ſhape as is repreſented on the plate, in the young ones convex, ſmooth, mouſe coloured, blueiſh, the edge intire, rolled in; in the older ones flattiſh, or a little hollow, and brown; the baſe in the lower ones cover'd with a white kind of down; fleſh very white, thick, and ſweetiſh to the taſte.
LAMELLÆ primum albæ, demum ex ruſo-cinereæ, plurimæ, tenues, inæquales, a lineis duabus ad ſex latæ, decurrentes, baſi anaſtomoſantes, exſuccæ.	GILLS at firſt white, afterwards of a reddiſh aſh colour, numerous, thin, unequal, from two lines to ſix in breadth, decurrent, uniting ſo as to form a kind of network at bottom, juiceleſs.

Conſidering the ſize and ſingularity of this Muſhroom, and that is by no means uncommon, it is matter of ſurprize that it ſhould have eſcaped the notice of our Engliſh Botaniſts; one reaſon perhaps may be aſſigned, viz. that it makes its appearance later in the ſeaſon than moſt others: in December and January when the weather has been mild I have found it on the bodies of the old Willow Trees, in the neighbourhood of Saint Georges-Fields; Mr. DICKSON has obſerved it on the Elm, in Saint James's-Park, and JACQUIN from whom we borrow the name of *oſtreatus*, deſcribes it as growing out of the Walnut.

As this ſpecies and another with a ſooty ſtalk which we propoſe hereafter to figure, are almoſt the only ones that are found on trees ſo late in the year, it cannot eaſily be miſtaken, tho' like moſt of the family it is given to ſport; in general it grows in cluſters of three, ſix, or more of different ſizes, placed one over another, bearing a diſtant reſemblance to oyſters, when young and perfect they are of a mouſe colour with a bloom on them like that of a plum, the edge is rolled in, the gills are white, decurrent, and beautifully anaſtamoſe at bottom, but it is not in every ſpecimen that this diſtinguiſhing character is obſervable, as it grows old the pileus turns up (vid. uppermoſt fig. on the plate) the gills become of a browniſh colour, and frequently much waved, and the whole withers on the tree, the two lowermoſt figures on the plate repreſent the Fungus in its young ſtate and ſhew both ſides.

To the ſmell it is ſlightly fragrant, to the taſte mild, but in chewing tough.

Agaricus ostreatus

Agaricus ostreatus. Oyster Mushroom.

Sambucus Ebulus.

SAMBUCUS EBULUS. DWARF ELDER.

SAMBUCUS *Lin. Gen. Pl.* PENTANDRIA TRIGYNIA.

Cal. 5-partitus. *Cor.* 5-fida. *Bacca.* 3-ſperma.

Raii Syn. Gen. ARBORES ET FRUTICES.

SAMBUCUS *Ebulus* cymis tripartitis, ſtipulis foliaceis, caule herbaceo. *Lin. Syſt. Veget.* p. 244. *Sp. Pl.* p. 385. *Fl. Suecic.* n. 266.

SAMBUCUS herbacea; floribus umbellatis. *Haller. hiſt.* n. 671.

SAMBUCUS *Ebulus. Scopoli Fl. Carn.* n. 371.

SAMBUCUS humilis ſeu Ebulus. *Bauh. Pin.* 456.

EBULUS ſive Sambucus humilis. *Ger. emac.* 1426. *Parkins.* 209. *Raii Syn.* 461. Dwarf-Elder, Walwort, or Danewort.

Hudſon. Fl. Angl. ed. 2. *p.* 130.

Lightfoot. Fl. Scot. p. 171.

RADIX repens, vix eradicanda.

CAULIS orgyalis, herbaceus, teretiuſculus, glaber, undique ſtriato-ſulcatus, ſubgeniculatus: geniculis purpureis, ſuperne ramoſus, ramis oppoſitis, erectis.

FOLIA oppoſita, pinnata, quadrijuga, ſeu ſexjuga, cum impari, ſtipulata ſeu exſtipulata, foliolis ovato-lanceolatis, baſi inæqualibus, ſerratis, venoſis, ſupra glabris, ſubtus pubeſcenti-ſcabris, pallidioribus, inferioribus ſæpe lobato-inciſis.

STIPULÆ quaternæ, petiolatæ, ſubcordatæ, ſerratæ, ſuperioribus ſepe recurvatis.

CORYMBUS terminalis, tripartitus, ramis ſubnudis, exterioribus teretiuſculis, intermedio compreſſo; compoſitus e cymis pluribus pedunculatis, nudis; floribus pedicellatis.

CALYX: PERIANTHIUM monophyllum, ſuperum, quinquedentatum, dentibus ovato-acutis, erectis, purpureis. *fig.* 1.

COROLLA monopetala, rotata, quinquepartita, laciniis ovato-acutis, concavis, reflexis, externe ad apicem purpuraſcentibus et rugoſis. *fig.* 2.

STAMINA: FILAMENTA quinque, ſuberecta, teretiuſcula, craſſa, rugoſa, alba, longitudine corollæ; ANTHERÆ primum rubicundæ, magnæ, didymæ, ſibi invicem paululum remotæ, parallelæ, oblongæ, ſupra ſulcatæ, demum nigricantes. *fig.* 3.

PISTILLUM: GERMEN inferum, ſubovatum, obſolete angulatum, glabrum; STYLUS nullus; STIGMATA tria, ſubreniformia, colorata, glutinoſa. *fig.* 4. 5.

ROOT creeping, ſcarce to be eradicated.

STALK ſix feet high, herbaceous, roundiſh, ſmooth, channeled, joints ſomewhat enlarged, purpliſh, branched above, the branches oppoſite and upright.

LEAVES oppoſite, pinnated, having four or ſix pair of pinnæ with an odd one at the extremity, with or without ſtipulæ, the pinnæ or ſmall leaves ovato-lanceolate, unequal at the baſe, ſerrated, veiny, ſmooth above, downy with a ſlight roughneſs underneath, and whiter, the lowermoſt often cut into lobes.

STIPULÆ growing in fours, ſtanding on foot-ſtalks, ſomewhat heart-ſhaped, ſerrated, the uppermoſt often bent back.

CORYMBUS terminal, divided into three branches, which are ſomewhat naked, the outer ones roundiſh, the middle one flattened, compoſed of numerous cymæ, ſtanding on partial foot-ſtalks, bloſſoms alſo furniſhed with foot-ſtalks:

CALYX: a PERIANTHIUM of one leaf, placed above the germen, having five teeth, which are ſhort, broad, pointed, upright and purple. *fig.* 1.

COROLLA monopetalous, wheel-ſhaped, divided into five ſegments, which are ovate, pointed, hollow and turn'd back, externally at the tip purpliſh and wrinkled. *fig.* 2.

STAMINA: five FILAMENTS, nearly upright, roundiſh, thick, wrinkled, white, the length of the corolla; ANTHERÆ firſt reddiſh, large, double, at a little diſtance from each other, parallel, oblong, grooved above, laſtly becoming of a blackiſh colour. *fig.* 3.

PISTILLUM: GERMEN placed below the corolla, ſomewhat ovate, faintly angular, and ſmooth; STYLE none, STIGMATA three, ſomewhat kidney-ſhaped, coloured, and glutinous. *fig.* 4. 5.

THE leaves, roots, and bark of the dwarf Elder have a nauſeous, ſharp, bitter taſte, and a kind of acrid ungratefull ſmell; they are all ſtrong cathartics, and as ſuch are recommended in Dropſies, and other caſes where medicines of that kind are indicated. The bark of the root is ſaid to be the ſtrongeſt; the leaves the weakeſt; but they are all too churliſh medicines for general uſe: they ſometimes evacuate violently upwards, almoſt always nauſeate the ſtomach and occaſion great uneaſineſs of the bowels: by boiling they become like the other draſtics milder and more ſafe in their operation; the berries of this plant are likewiſe purgative, but leſs virulent than the other parts: a rob prepar'd from them may be given to the quantity of an ounce as a cathartic; and in ſmaller ones as an aperient and deobſtruent in chronic diſorders. In this laſt intention it is ſaid by HALLER to be frequntly uſed in Swiſſerland in the doſe of a dram. LEWIS's *Diſp. p.* 137.

In moſt Phyſic Gardens this plant is cultivated, but is rarely met with wild about London; I have obſerved it two places only, the one in a hedge which ſurrounds a part of Mr. BEAUFOY's Garden, Cupers-Bridge, Lambeth Marſh, the other in a Lane leading down to Upton, Eſſex, by the garden wall of the late Dr. FOTHERGILL.

It differs from the common Elder in many reſpects, particularly in being herbaceous, and in having a root which creeps and is very troubleſome in gardens, its leaves alſo are narrower with more numerous pinnæ attached to the mid-rib; the lower pinnæ of which are ſubject to a ſingular variation as is ſhewn in the figure.

Not leſs does it differ in its fructification as will appear from the deſcription to which the reader is referred, It flowers in June and July, and but rarely ripens its berries.

VINCA MAJOR. GREAT PERIWINKLE.

VINCA *Lin. Gen. Pl.* PENTANDRIA MONOGYNIA.

Contorta. *Folliculi* 2, erecti, *Semina* nuda.

Raii. Syn. Gen. 17. HERBÆ MULTISILIQUÆ SEU CORNICULATÆ.

VINCA major caulibus erectis, foliis ovatis, floribus pedunculatis. *Lin. Syſt. Vegetab.* p. 304.

PERVINCA caulibus erectis, foliis ovato-lanceolatis ciliatis, petiolis unifloris. *Haller. hiſt.* n. 573.

PERVINCA major. *Scopoli Fl. Carn.* n. 174.

CLEMATIS daphnoides major. *Bauh. pin.* 302.

CLEMATIS daphnoides ſ. Pervinca major. *Ger. emac.* 894.

CLEMATIS daphnoides latifolia, ſ. Pervinca major. *Parkins.* 380. *Raii Syn.* p. 268. The greater Periwinkle. *Hudſon Fl. Angl. ed.* p. 91.

RADIX perennis, fibroſa, fibris albidis ſeu fuſcis.	ROOT perennial and fibrous, the fibrous whitiſh or of a brown colour.
CAULES florigeri erecti, bipedales et ultra, teretes, lateribus alterne ſubcompreſſis, glabri, rubro maculati, cauliculi etiam ſunt ſteriles qui humi repent aut plantas vicinas ſcandent.	STALKS producing the flowers upright, two feet high and upwards, round, the ſides alternately ſomewhat flattened, ſmooth, dotted with red, there are alſo other ſtalks producing no flowers which creep on the ground or climb the neighbouring plants.
FOLIA oppoſita, petiolata, ovata, glaberrima, minutim ciliata, remota, ſempervirentia.	LEAVES oppoſite, ſtanding on footſtalks, ovate, ſmooth, ſhining, finely edged with hairs, remote from each other, and evergreen.
PEDUNCULI foliis longiores, erecti, teretes, glabri, filiformes, uniflori.	FLOWER-STALKS longer than the leaves, upright, round, ſmooth, filiform, each ſupporting one flower.
FLORES ampli, pallide cærulei.	FLOWERS large, of a pale blue colour.
CALYX: PERIANTHIUM quinquepartitum, laciniis ſublinearibus, ciliatis, longitudine fere tubi corollæ. *fig.* 1.	CALYX: a PERIANTHIUM divided into five ſegments, the ſegments ſomewhat linear, ciliated, almoſt the length of the tube of the corolla. *fig.* 1.
COROLLA monopetala, hypocrateriformis, tubus inferne cylindraceus, ſuperne latior, lineis quinque inſculptus, ore pentagono, albido, limbus horizontalis, quinquepartitus, laciniis extrorſum latioribus, oblique truncatis. *fig.* 2.	COROLLA monopetalous, ſalver-ſhaped, the tube below, cylindrical, above broader, having five grooves, the mouth whitiſh, five cornered, the limb horizontal, divided into five ſegments which are externally broadeſt, and obliquely cut off. *fig.* 2.
STAMINA: FILAMENTA quinque breviſſima, inflexa, retroflexa; ANTHERÆ biloculares, introrſum dehiſcentes, membranâ piloſâ incurva terminatæ. *fig.* 3.	STAMINA: five FILAMENTS very ſhort, firſt bent in, and afterwards bent back; ANTHERÆ bilocular, opening inwardly, terminated by a hairy membrane bent in at top. *fig.* 3.
PISTILLUM. GERMINA duo, compreſſa glandulis duabus nitidis liquorem melleum copioſe effundentibus; STYLUS utrique unus communis, ad baſin ſenſim gracileſcens; STIGMATA duo, inferius orbiculatum, planum, ſuperius albiſſimum, piloſum, membranis antherarum obtecta. *fig.* 4.	PISTILLUM: GERMINA two, preſſed by two ſhining glands which pour forth plentifully a ſweet liquor; STYLE one common to both, gradually tapering to the baſe; STIGMATA two, the lowermoſt round and flat, the uppermoſt very hairy, covered by the membrane of the antheræ. *fig.* 4.

In the *Syſtema Vegetabilium* of LINNÆUS, the laſt of his works publiſhed under his direction, this plant is ſuſpected to be a variety of the *Vinca minor*, a ſuſpicion for which there appears to be no grounds, and which is contrary to the united opinion of Botaniſts both antient and modern; the *minor* it is true has many varieties, but they relate to the colour of the bloſloms, and leaves, and the multiplication of the former merely, no alteration is produced in the general habit of the plant, not even by long continued culture; HALLER, in his ſpecific character of the *major*, obſerves, that the leaves are finely edged with hairs, ſo far as our obſervation extends this is conſtant, and may ſerve, if any difficulty of diſtinguiſhing them ſhould ariſe, to ſettle it.

The *major*, like the *minor*, is common enough with us in gardens, but rarely met with wild, yet I have noticed it in ſeveral places, particularly under Lord Stormont's Park pales, on the left hand ſide of the road, betwixt Wandſworth and Putney-Common, and in a field near Beckenham, in Kent, where it was certainly in a wild ſtate.

It flowers in May and June.

It is regarded only as an ornamental plant, but ſhould be introduced into the garden with caution, as it encreaſes very much, and is apt to over-run and injure others.

Vinca major.

Veronica montana.

VERONICA MONTANA. MOUNTAIN SPEEDWELL.

VERONICA *Lin. Gen. Pl.* DIANDRIA MONOGYNIA.

Cor. Limbo 4 partito, laciniâ infimâ anguſtiore. *Capſula* bilocularis.

Raii Syn. Gen. 18. HERBÆ FRUCTU SICCO SINGULARI FLORE MONOPETALO.

VERONICA *montana* racemis lateralibus paucifloris, calycibus hirſutis, foliis ovatis rugoſis crenatis petiolatis, caule debili. *Lin. Syſt. Vegetab. Sp. Pl.* p. 56.

VERONICA caule procumbente, foliis hirſutis, cordatis, retuſis, racemis paucifloris. *Haller. hiſt.* n. 539.

CHAMÆDRYI ſpuriæ affinis rotundifolia ſcutellata. *Bauh. pin.* 249.

ALYSSON Dioſcoridis montanum. *Col. Ecph.* 1. 286.

VERONICA Chamædryoides, foliis pediculis oblongis inſidentibus. *Raii Syn.* p. 281. Wild Germander with Leaves ſtanding on long Foot-ſtalks.

Lightfoot Fl. Scot. p. 6.

Hudſon. Fl. Angl. ed. 2. p. 74.

RADIX perennis, fibroſa, fibrillis prælongis, fuſcis.	ROOT perennial and fibrous, the fibres very long and brown.
CAULES procumbentes, verſus baſin ſæpe radicantes, teretes, pilis mollibus undique hirſuti, purpuraſcentes.	STALKS procumbent, often taking root towards the baſe, round, covered with ſoft hairs, and purpliſh.
FOLIA oppoſita, petiolata, ovato-cordata, obtuſiuſcula, inæqualiter ſerrata, hirſutula, nitidula, ſubtus purpuraſcentia, parum concava et bullata.	LEAVES oppoſite, ſtanding on footſtalks, ovato-cordate, a little blunt, unequally ſerrated, ſlightly hairy, ſomewhat ſhining, purpliſh underneath, a little hollow and cockled.
PETIOLI longitudine fere foliorum, hirſutiſſimi.	LEAF-STALKS almoſt the length of the leaves, and very hairy.
RACEMI laterales, alterni, ſubinde oppoſiti, tenues, hirſuti, pauciflori.	FLOWER-BRANCHES lateral, alternate, ſometimes oppoſite, ſlender, hairy, ſupporting few flowers.
PEDUNCULI alterni, hirſuti, bractæâ lanceolatâ ſuffulti.	FLOWER-STALKS alternate, hairy, ſupported by a narrow floral-leaf.
CALYX: PERIANTHIUM tetraphyllum, foliolis ſubæqualibus, ovatis, baſi anguſtatis, hirſutis, pilis ad lentem globuligeris. *fig.* 1.	CALYX: a PERIANTHIUM compoſed of four leaves, which are nearly equal, ovate, narrowed at the baſe, hairy, the hairs globular at the extremity when magnified. *fig.* 1.
COROLLA monopetala, rotata, ex purpureo-cæruleſcens, ſupremâ laciniâ ſaturatius coloratâ, una cum lateralibus venis cæruleis pictâ, infimâ minore immaculata, *tubus* breviſſimus, albus. *fig.* 2.	COROLLA monopetalous, wheel-ſhaped, of a blueiſh purple colour, the uppermoſt ſegment more deeply coloured than the others, and together with the ſide ones ſtreakt with blue veins, the lowermoſt leaſt without any veins, the *tube* very ſhort and white. *fig.* 2.
STAMINA: FILAMENTA duo, tubo corollæ inſerta, baſi albida, curvata, medio craſſiora; ANTHERÆ cæruleæ; POLLEN album *fig.* 3.	STAMINA: two FILAMENTS, inſerted into the tube of the corolla, whitiſh at the baſe, bent, thickeſt in the middle; ANTHERÆ blue; POLLEN white. *fig.* 3.
PISTILLUM: GERMEN obovatum, hirſutum; STYLUS ſuperne ſenſim incraſſatus; STIGMA capitatum, album. *fig.* 4. 5.	PISTILLUM: GERMEN inverſely ovate, hairy; STYLE towards the top gradually thickened; STIGMA forming a ſmall white head. *fig.* 4. 5.
PERICARPIUM: CAPSULA magna, orbiculata, emarginata, compreſſa. *fig.* 6.	SEED-VESSEL: a large, round, flat CAPSULE nicked at top. *fig.* 6.
SEMINA pauca, ovata, plana, flaveſcentia. *fig.* 7.	SEEDS few, ovate, flat and yellowiſh. *fig.* 7.

The *Veronica montana* is very ſimilar in its general appearance to the *Chamædrys*, and of which, by ſome authors, it has been conſidered as only a variety; but this has ariſen from a very ſuperficial enquiry, as no two plants can be more diſtinct; LINNÆUS might indeed have ſelected a ſpecific character, which would effectually have removed every doubt of this kind, viz. the ſhape and ſize of the ſeed-veſſels, theſe in the *montana* are at leaſt thrice as large as thoſe of the *chamædrys*, they are alſo much rounder and flatter, while the flowers on the contrary are not more than half as large, and much leſs ſhowy; when we have not theſe characters to aſſiſt us, the ſtalk and leaves will in general be ſufficient, in the *chamædrys* the hairs grow on two ſides of the ſtalk only, in the *montana* they grow all around it, in the *chamædrys* the leaves are generally ſeſſile, in the *montana* they ſtand on footſtalks.

Theſe two plants differ alſo in their places of growth, the *montana*, ſo far as I have obſerved it, preferring moiſt and ſhady ſituations, whence the term *montana* ſeems ill-applied to it; near London, it is found plentifully in Charlton Wood, behind the Church, and flowers in June and July.

Eriophorum polyſtachion. Many-Headed Cotton-Graſs.

ERIOPHORUM *Lin. Gen. Pl.* Triandria Monogynia.

Glumæ paleaceæ, undique imbricatæ. *Cor.* 0. *Sem.* 1. *Lanâ* longiſſimâ cinctum.

Raii. Syn. Gen. 23. Herbæ graminifoliæ non culmiferæ flore imperfecto seu stamineo.

ERIOPHORUM *polyſtachion* culmis teretibus, foliis planis, ſpicis pedunculatis. *Lin. Syſt. Vegetab.* p. 87. *Sp. Pl.* p. 76. *Fl. Suec.* n. 49.

ERIOPHORUM foliis planis, ſpicis pendulis. *Haller. hiſt.* n. 1331.

LINAGROSTIS *polyſtachia. Scopoli. Fl. Carn. n.* 66.

GRAMEN pratenſe tomentoſum panicula ſparſa. *C. B. Pin.* 4.

GRAMEN tomentarium. *Ger. emac.* 29.

GRAMEN junceum lanatum, vel juncus bombycinus vulgaris. *Park.* 1271. *Scheuzch. Agroſt. ed. Haller.* p. 306. *Vaill. Bot. Paris.* t. 16. f. 1. 2. *Raii Syn.* p. 433. Cotton-graſs.

Lightfoot Fl. Scot. p. 89.
Hudſon Fl. Angl. ed. p. 21.

RADIX peremnis, repens, fuſca, ſeu caſtanei coloris, fibrillis plurimis albis, aut rubentibus inſtructa.	ROOT perennial, creeping, of a brown or cheſnut colour, furniſhed with numerous white or reddiſh fibres.
CULMUS ſæpius ſolitarius, dodrantalis, ſeu pedalis, et ultra, erectus, teres, lævis, geniculis duobus parum extantibus plerumque notatus, vaginis foliorum per totam longitudinem tectus.	STALK for the moſt part ſolitary, from nine inches to a foot or more in height, upright, round, ſmooth, for the moſt part furniſhed with two joints which project a little, covered throughout its whole length with the ſheaths of the leaves.
FOLIA *ima* marcida, caſtanea, brevia, lanceolata, ſtriato-reticulata; *ſuperiora* baſi ſua arctè culmum amplectentia, lineas duas ad tres lata, ſpithamæa et ultra, ſenſim attenuata, ſæpe præmorſa, hinc convexa, inde concava, glabra; *ſuprema* planiora, multo breviora, et manifeſte carinata; *vaginæ* foliorum culmi, æquali ubique fere magnitudine, ubi folium exit paulo laxiores, et fiſſurâ membranâ impleta notatæ.	LEAVES *next the root* withered, of a cheſnut colour, ſhort, lanceolate, ſtriated, and marked with ſhort tranſverſe lines, which give them a reticulated appearance, the *ſucceeding leaves*, at their baſe cloſely embracing the ſtalk, from two to three lines in breadth, about ſeven inches or more in length, gradually tapering to the extremity, where they are often bit off, convex on one ſide, concave on the other, and ſmooth, the *uppermoſt leaves* flatter, much ſhorter, and manifeſtly keeled; *ſheaths* of the leaves nearly of an equal thickneſs throughout, where a leaf goes off more looſely connected, and marked with a fiſſure filled by a membrane.
BRACTEÆ tres aut quatuor, longitudine inæquales, baſi vaginantes, culmum terminant, e quarum ſinubus ſpiculæ prodeunt.	FLORAL-LEAVES three or four of unequal lengths, forming ſheaths at bottom terminate the ſtalk, from the alæ of which the ſpiculæ proceed.
SPICULÆ plerumque plures a duabus ad ſeptem, ovatæ, immaturæ erectæ, per ætatem pendulæ.	SPICULÆ for the moſt part ſeveral, from two to ſeven, ovate, firſt upright, afterwards pendulous.
CALYX: *ſpica* undique imbricata: ſquamis ovato oblongis, plano-inflexis, membranaceis, laxis, acuminatis, flores diſtinguentibus. *fig.* 1.	CALYX: a *ſpike* covered on all ſides with imbricated ſquamæ, of an ovate-oblong ſhape, flat and bent in a little, membranous, looſe, running out to a long point, diſtinguiſhing the flowers. *fig.* 1.
COROLLA nulla.	COROLLA wanting.
STAMINA: Filamenta tria, capillaria; Antheræ erectæ, oblongæ. *fig.* 2.	STAMINA: three Filaments very fine; Antheræ upright and oblong. *fig.* 2.
PISTILLUM: Germen minimum; Stylus filiformis, longitudine ſquamæ calycis; Stigmata tria, ſtylo longiora, reflexa. *fig.* 3.	PISTILLUM: Germen very ſmall; Style thread-ſhaped, the length of the ſcales of the calyx; Stigmata three, longer than the ſtyle, turned back. *fig.* 3.
PERICARPIUM nullum.	SEED-VESSEL none.
SEMEN triquetrum, acuminatum, nigrum, villis ſpicâ longioribus inſtructum. *fig.* 4. 5. 6. 7.	SEED three-cornered, pointed, black, furniſhed with hairs which are longer than the ſpike. *fig.* 4. 5. 6. 7.

The Genus *Eriophorum* is in a particular manner diſtinguiſhed from the other genera related to it, by the length of the hairs which envelope the ſeed; and which, when the ſeed is ripe, aſſume the appearance of cotton, whence its name of Cotton-graſs, this cotton is much longer, and produced in greater quantities in the *polyſtachion*, than in the *vaginatum*; and in Germany, and the more northern countries, has been manufactured into various articles of dreſs, paper, and wicks for candles. Linnæus, in his *Flora lapponica*, informs us, that in ſome parts of Sweden, the peaſants ſtuff their pillows with it inſtead of feathers, but that in Lapland, where the plant is ſufficiently plentiful, they do not apply it to any ſuch purpoſe, the ſkin of the Rein-deer forming the whole of their bed and its furniture.

In the ſpring, Cattle appear to be very fond of its leaves, as they are generally found cropt, this may ariſe from the ſcarcity of herbage at that ſeaſon of the year, as the plant advances the ſtems are always left untouched; it is in moors and boggy ground only that this plant is found, and in ſuch ſituations it is very plentiful; whole acres being often rendered white as ſnow by it in the months of June and July when in ſeed.

It flowers in April and May, and may be found in Batterſea meadows.

Eriophorum polystachion.

Eriophorum vaginatum.

Eriophorum vaginatum. Single-headed Cotton-Graſs.

ERIOPHORUM *Lin. Gen. Pl.* TRIANDRIA MONOGYNIA. *Glumæ* paleaceæ, undique imbricatæ. *Cor.* o. *Sem.* 1. *Lanâ* longiſſimâ cinctum.

Raii Syn. Gen. 28. HERBÆ GRAMINIFOLIÆ NON CULMIFERÆ FLORE IMPERFECTO SEU STAMINEO.

ERIOPHORUM *vaginatum* culmis vaginatis teretibus, ſpica ſcarioſa. *Lin. Syſt. Vegetab.* p. 87. *Sp. Pl. p.* 76. *Fl. Suec. n.* 50.

ERIOPHORUM caule tereti, foliis caulinis vaginalibus, ſpica erecta, ovata. *Haller. hiſt.* n. 1332.

LINAGROSTIS *vaginata. Scopoli Fl. Carn. n.* 66.

JUNCUS alpinus, capitulo lanuginoſo, ſeu ſchænolaguros. *Bauh. pin.* 12. *Scheuzch. Agroſt.* p. 302. t. 7.

JUNCUS alpinus cum cauda leporina, *Bauh. hiſt.* 2. 514.

GRAMEN juncoides lanatum alterum danicum. *Parkins.* 1271. *Raii Syn.* p. 436. Hares-tail ruſh.

Lightfoot Fl. Scot. p. 90.

Hudſon. Fl. Angl. ed. 2. p. 22.

The *Eriophorum vaginatum* is with us a much ſcarcer plant than the *polyſtachion*, but in ſome parts of *Great Britain*, and in other Countries, is equally common.

In its generic characters, excepting the ſhortneſs of its *Pappus*, it agrees with the *polyſtachion*; it has therefore the ſame figures of reference to them; in its ſpecific characters, it differs very obviouſly, its root is not creeping but more matted, and its leaves, which are much finer, are conſequently more apt to grow in tufts; the vagina of the upper ſtem-leaf in particular is remarkably inflated, and it never produces more than one ſpike, which is upright.

It is found in ſimilar ſituations to the other; on the boggy parts of Shirley Common, near Croydon, I have found it in tolerable plenty; it flowers ſomewhat earlier than the *polyſtachion*, but produces its *pappus* about the ſame time.

Sheep are very fond of it, whence in Weſtmoreland they call it Moſs-crops. *Raii. Syn.* p. 436.

BOLETUS LUCIDUS. LACQUERED BOLETUS.

BOLETUS. *Lin. Gen. Pl.* CRYPTOGAMIA FUNGI. *Fungus* horizontalis ſubtus poroſus.
Raii Syn. Gen. 1. FUNGI.

BOLETUS *lucidus*, pileo coriaceo ſuperne caſtaneo lucido, ſulcis circularibus notato, inferne albo; poris minutiſſimis.

BOLETUS *rugoſus.* *Jacquin. Fl. Auſtr.* t. 169.

FUNGUS coriaceus, pileolo latiſſimo atrorubente, pediculo breviſſimo. *Raii Syn. ed.* 3. p. 11. ?

FUNGUS ſpecioſus putridis arborum truncis et ſtipitibus preſertim coryli innaſcitur, totus lignoſo-coriaceus et perſiſtens.	This handſome Fungus grows out of the trunks of decayed trees, particularly the ſtumps of the hazel, and is throughout of a leathery or ſomewhat woody ſubſtance, and permanent.
STIPES durus, inæqualis, caſtaneus, vernice veluti obductus.	STALK hard, uneven, of a cheſnut colour, ſhining as if varniſhed.
PILEUS plerumque ſubdimidiatus, nonnunquam orbiculatus, planus, ſuperne caſtaneus, nitidiſſimus, ſulcis circularibus concentricis notatus, rugoſus, inferne dum recens albiſſimus; poris minutiſſimis.	CAP for the moſt part forming half a circle, ſometimes a whole one, flat, on the upper ſide of a cheſnut colour, and highly poliſhed, marked with circular concentric grooves, the edge thick and wrinkled; on the under ſide, when freſh, very white, the pores exceedingly ſmall.
FUNGI duo connati, in tabula proponuntur, hinc atque illinc ſpectati, tum fungi pars inferior lente aucta ut pori magis luculenter appareant.	Two Fungi growing together, are repreſented on the plate in two different views; alſo part of the under ſide magnified, to ſhew the pores more plainly.

In the month of November, 1780, I fortunately found the fine ſpecimen of this Boletus, exhibited on the plate, in the Wood adjoining the Oak of Honour, near Peckham; on firſt diſcovering it, the top of the Pileus and ſtalk were of ſo bright a colour, and ſo beautifully poliſhed, that I ſcarcely knew whether I had found a natural or an artificial production, a view of its under ſide, however, ſoon convinced me it was natural; it grew out of a rotten hazel ſtump.

One principal character of this Fungus, is its poliſhed or rather lacquered ſurface, for it has all the appearance of having been varniſhed; this I believe it poſſeſſes in all its ſituations; and on this account I have given it a name different from *Jacquin*, who has an excellent figure of it under the title of *rugoſus*, in his *Fl. Auſtriaca*. The other characters which ſeem to be conſtant, are the depreſſed circles on the upper ſide of the Pileus, its wrinkled, thick, and ſomewhat inverted edge, which is very apt to break out on the under ſide of the Pileus, as repreſented on the plate, but omitted by Jacquin; the unuſual whiteneſs of the pileus on its under ſide and the extreme fineneſs of its pores, which may be overlooked; it appears to be inconſtant in the ſhape of its pileus (which is ſometimes *orbiculatus*, as is ſhewn on the plate in a ſmaller Fungus of the preceding year, and ſometimes *dimidiatus*); and in its ſtalk, which is ſometimes wanting, as I diſcovered from a ſpecimen growing out of the bottom of an elm tree near Hyde Park.

The ſtalk of the ſpecimen figured, which I preſerve, has not ſhrunk at all, the pileus is about one third leſs, but retains its form and much of its beauty.

There was ſome reaſon to ſuſpect this Boletus of being the *perennis* of LINNÆUS, but the deſcription given of that plant in his *Flora Lapponica* removed every doubt, and convinced me he had not deſcribed it.

Boletus lucidus.

Sedum sexangulare.

SEDUM SEXANGULARE. INSIPID STONECROP.

SEDUM *Lin. Gen. Pl.* Decandria Pentagynia,

Cal. 5 fidus. *Cor.* 5 petala. *Squamæ* nectariferæ 5 ad baſin germinis. *Caps.* 5.

Raii Syn. Gen. 17. Herbæ multisiliquæ seu corniculatæ.

SEDUM *ſexangulare* foliis ſubovatis adnato ſeſſilibus gibbis erectiuſculis ſexfariam imbricatis. *Lin. Syſt. Vegetab.* p. 359. *Spec. Plant.* p. 620. *Fl. Suecic. n* 404.

SEDUM ſoliis teretibus, ternatis; caulibus ſimplicibus trifidis. *Haller. hiſt. n.* 965.

SEDUM *ſexangulare. Scopoli Fl. Carn. n.* 558.

SEMPERVIVUM minus vermiculatum inſipidum. *Bauhin. pin.* 284.

SEDUM minimum luteum non acre. *Bauhin. hiſt.* 3. p. 695. *Hudſon Fl. Angl. ed.* 1. p. 172.

RADIX perennis, fibroſa.	ROOT perennial and fibrous.
CAULES baſi repentes, floriferi erecti, tripollicares et ultra, teretes, glabri, punctati, inferne nudi, rubentes.	STALKS creeping at the baſe, thoſe which produce flowers about three inches or more in height, round, ſmooth, dotted, below naked and of a reddiſh colour.
FOLIA oblonga, carnoſa, teretiuſcula, obtuſa, erecto-patentia, ſexfariam imbricata, preſertim ante floreſcentiam, rigidula, adnato-ſeſſilia, inferne rubentia, ſuperne caulibus ſaltem floriferis e flavo viridia, inſipida.	LEAVES oblong, fleſhy, roundiſh, obtuſe upright, but bending a little outward, placed one over another in ſix rows, eſpecially before the bloſſoms open, ſomewhat rigid, ſeſſile, as if ſtuck to the ſtalk, thoſe on the lower part of the ſtem of a reddiſh colour, on the upper part yellowiſh, at leaſt on the flowering ſtalks, inſipid.
CYMA plerumque trifida, floribus in ſingulo ramulo tribus ad quinque, ſeſſilibus.	CYMA generally divided into three branches, on each of which are placed from three to five flowers, without footſtalks.
CALYX: Perianthium quinquepartitum, laciniis obtuſis, carnoſis, baſi tenuioribus.	CALYX: a Perianthium divided into five ſegments, which are obtuſe, fleſhy, and ſlenderer at the baſe.
COROLLA: Petala quinque, flava, lanceolata, acuminata, calyce duplo longiora, patentia. *fig.* 2.	COROLLA: five yellow Petals, lance-ſhaped, acuminated, ſpreading, twice the length of the calyx. *fig.* 2.
STAMINA: Filamenta decem, ſubulata, longitudine corollæ; Antheræ ſubrotundæ, flaveſcentes. *fig.* 3. 4.	STAMINA: ten Filaments, tapering, the length of the corolla; Antheræ roundiſh, and of a yellowiſh colour. *fig.* 3. 4.
PISTILLUM: Germina quinque, erecta, oblonga, deſinentia in Stylos tenuiores; Stigmata ſimplicia. *fig.* 5.	PISTILLUM: Germina five, upright, oblong, terminating in ſlender Styles: Stigmata ſimple. *fig.* 5.

In Dillenius's edition of *Ray's Synopſis* this plant is omitted, and not conſidered even as a variety of the *Sedum acre.* Mr. Hudson, in the firſt edition of his *Flora Anglica,* introduced it as a diſtinct ſpecies. in which he followed the opinion of Linnæus; in his laſt edition, without aſſigning any reaſon, he makes it a variety of the *Sedum acre*; Haller, however, and Scopoli confirm Linnæus's opinion, and on ſuch authority we ſurely may differ from Mr. Hudson.

The conſtant want of that biting taſte which gives the name of *Wall Pepper* to the *Sedum acre,* has been conſidered by many of our Engliſh Botaniſts ſufficient to conſtitute this a diſtinct ſpecies; for though acrid plants may ſometimes become mild, as in the *Hydropiper,* yet inſtances of that kind very rarely occur, but it is not in its taſte alone that the *ſexangulare* differs from the *acre,* in its leaves we ſhall find a ſatisfactory difference, on comparing theſe together as they grow on the flowering ſtems of both plants, we find thoſe of the *acre* ſhort, broad at the baſe, and at a conſiderable diſtance aſunder, *vid. fig.* 1. while thoſe of the *ſexangulare* are nearly of the ſame thickneſs throughout, longer, and more numerous, *vid fig.* 1. we may alſo add, that they are in general much redder, in the young ſhoots of the *ſexangulare* the leaves form ſix rows or angles, which are ſometimes ſtraight and ſometimes oblique; no traces of which are viſible in the *acre*; another circumſtance which adds ſome weight to the foregoing is, that the *acre* flowers a fortnight ſooner than the *ſexangulare*; the parts of the fructification afford little or no difference, indeed a great ſameneſs in this reſpect runs through the whole genus.

We find this plant growing plentifully on Greenwich-park-wall, the ſouth ſide, near the weſtern corner.

It flowers about the latter end of June.

CAMPANULA ROTUNDIFOLIA. HEATH BELL-FLOWER.

CAMPANULA *Lin. Gen. Pl.* PENTANDRIA MONOGYNIA.

Cor. campanulata, fundo clauſo valvis ſtaminiferis. *Stigma* trifidum.
Caps. infera, poris lateralibus dehiſcens.

Raii Syn. Gen. 18. HERBÆ FRUCTU SICCO SINGULARI FLORE MONOPETALO.

CAMPANULA *rotundifolia* foliis radicalibus reniformibus, caulinis linearibus. *Lin. Syſt. Vegetab.* p. 173. *Sp. Plant.* p. 232. *Fl. Suec.* n. 184.

CAMPANULA foliis ſerratis, radicalibus cordatis, caulinis lanceolatis. *Haller. Hiſt.* 701.

CAMPANULA *rotundifolia.* *Scopoli Fl. Carn.* n. 124.

CAMPANULA *minor* rotundifolia vulgaris. *Bauhin pin.* 93.

CAMPANULA rotundifolia. *Ger. emac.* 452.

CAMPANULA minor ſylveſtris rotundifolia. *Parkinſon* 651. *Raii Syn.* p. 277. The leſſer round-leaved Bell-flower. *Hudſon. Fl. Angl. ed.* 2. p. 95. *Lightfoot Fl. Scot.* p. 141.

RADIX alba, craſſiuſcula, modice fibroſa, ſubdulcis, repens.	ROOT white, thickiſh, moderately fibrous, ſweetiſh, and creeping.
CAULES ex una radice plures, pedales et ultra, ſub-erecti, debiles, flexuoſi, teretes, glabri, ſolidi, lacteſcentes, ramoſi.	STALKS; from the ſame root ſeveral, a foot or more in height, ſomewhat upright, but weak and crooked, round, ſmooth, ſolid, milky, and branched.
FOLIA radicalia cordato-reniformia, petiolata, dentato-ſerrata, caulina prope baſin lanceolata, dentata, ſumma linearia, integerrima.	LEAVES of the root ſomewhat heart or kidney ſhaped, ſtanding on footſtalks, toothed, or ſawed, thoſe of the ſtalk near the baſe lanceolate and toothed, near the ſummit linear and entire.
RAMI floriferi, patuli, ſimplices ſeu ramoſi, ſubnudi.	FLOWER-BRANCHES ſpreading, ſimple or branched, almoſt naked.
FLORES perfecte campanulati, cærulei, parum nutantes.	FLOWERS perfectly bell-ſhaped, of a blue colour, and drooping a little.
CALYX: PERIANTHIUM quinquepartitum, erectum, glabrum, ſulcatum, perſiſtens, laciniis linearibus. *fig.* 1.	CALYX: a PERIANTHIUM divided into five ſegments, upright, ſmooth, grooved, permanent, the ſegments linear. *fig.* 1.
COROLLA monopetala, campanulata, limbo quinquefido, laciniis acutis, patentibus. *fig.* 2.	COROLLA monopetalous, bell-ſhaped, divided into five ſegments at the brim, which are pointed and ſpreading. *fig.* 2.
STAMINA: FILAMENTA quinque, capillaria, breviſſima, inſerta valvularum nectarii apicibus; ANTHERÆ filamentis longiores, compreſſæ, primo purpuraſcentes, dein fuſcæ. *fig.* 3, 4, 5.	STAMINA: five very fine, ſhort FILAMENTS inſerted into the tips of the valves of the nectary; ANTHERÆ longer than the filaments, flatten'd, at firſt purpliſh, afterwards brown. *fig.* 3, 4, 5.
PISTILLUM: GERMEN inferum, ſulcatum; STYLUS filiformis; STIGMA tripartitum, oblongum, craſſiuſculum, externe villoſum, laciniis revolutis. *fig.* 6, 7, 8.	PISTILLUM: GERMEN beneath the calyx, grooved; STYLE thread-ſhaped; STIGMA oblong, thickiſh, externally villous, divided into three ſegments which are rolled back. *fig.* 6, 7, 8.
NECTARIUM in fundo corollæ, conſtructum valvulis quinque, acutis, conniventibus, receptaculum tegentibus. *fig.* 5.	NECTARY in the bottom of the corolla, formed of five pointed valves cloſing and covering the receptacle. *fig.* 5.

When the *Campanula rotundifolia* grows among herbage, its radical leaves, which are of a roundiſh figure, at leaſt compared with moſt of the plants of the ſame genus, are ſeldom obſerved, unleſs particularly ſought for, while thoſe of the ſtalk are ſeen by every one to be linear; hence the name of *rotundifolia* to moſt beginners appears abſurd. LINNÆUS in giving it this name has followed the antient Botaniſts, as will appear from conſulting the ſynonyms.

This plant, as well as the *Epilobium anguſtifolium*, points out to the ſtudent the neceſſity of attending to the following botanic axiom, *thoſe bloſſoms which are on the point of expanſion ſhew the ſtructure of the ſtamina to the moſt advantage, as thoſe which are overblown do that of the ſtigma.*

Subject to the ſame variation in point of ſize with all other plants, it may be found from * two inches to a yard in height, its radical leaves in certain ſituations are found without any notches, in which caſe it is more truly *rotundifolia*; its bloſſoms alſo vary in their colour, being ſometimes found white and ſometimes purple.

The ſtalks and branches, when broken, give out a milky juice, which has a diſagreeable ſmell.

It grows plentifully on heaths, and by the road ſides in barren hilly ſituations, and flowers from June to September.

Having a perennial and a creeping root it is eaſily cultivated in the Garden.

LINNÆUS ſays a green pigment is prepared from the flowers, but does not inform us in what manner.

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* Mr. *Lightfoot* found it of that height in *Scotland.*

Campanula rotundifolia.

Hypericum quadrangulum

HYPERICUM QUADRANGULUM. SQUARE-STALKED ST. JOHN'S WORT.

HYPERICUM *Lin. Gen. Pl.* POLYADELPHIA POLYANDRIA.

Cal. 5-partitus, *Petala* 5, *Filamenta* multa in 5 phalanges baſi connata. *Capſula.*

Raii Syn. Gen. 24. HERBÆ PENTAPETALÆ VASCULIFERÆ.

HYPERICUM *quadrangulum* floribus trigynis, caule quadrato herbacea. *Lin. Syſt. Vegetab. p.* 584. *Sp. Pl. p.* 1104. *Fl. Suec.* n. 670.

HYPERICUM caule quadrangulari, foliis ovatis perforatis punctatis. *Haller. Hiſt.* n. 1038.

HYPERICUM *quadrangulum. Scopoli Fl. Carn.* n. 943.

HYPERICUM vulgare minus caule quadrangulo foliis non perforatis. *Bauh. pin.* 272.

HYPERICUM Aſcyron dictum caule quadrangulo. *Bauh. Hiſt.* 3. p. 382.

ASCYRON *Dod. pempt.* 78. *Ger. emac.* 542. *vulgare Parkinſon* 575. *Raii Syn.* p. 344. St. Peter's Wort. *Hudſon. Fl. Angl. ed.* 2. p. 334. *Lightfoot Fl. Scot.* p. 416.

RADIX perennis, ſubrepens, fibroſa.

CAULIS pedalis ad ſeſquipedalem, erectus, ramoſus, glaber, rubeſcens, quadratus, quatuor membranulis, ſeu alis in ſecundum longitudinem productis.

FOLIA oppoſita, ſeſſilia, ovata, obtuſa, lævia, ſaturate viridia, ſubtus pallidiora, ſeptemnervia, per totam ſuperficiem punctis minutis diaphanis adſperſa, margine glandulis nigris ſubtus præſertim punctata.

RAMI cauli ſimiles, decuſſatim oppoſiti.

FLORES lutei, parvi, in ſummitatibus ramulorum denſe paniculati.

RAMULI paniculæ ſanguinei.

PEDUNCULI breviſſimi.

CALYX: PERIANTHIUM quinquepartitum, laciniis lanceolatis, patentibus, nervoſis, integerrimis, nudis. *fig.* 1.

COROLLA: PETALA quinque, lutea, lineata, glandulis paucis nigris ad oras punctata. *fig.* 2.

STAMINA: FILAMENTA plurima, in faſciculos vix diviſa; ANTHERÆ ſubrotundæ, flavæ, glandulâ nigrâ notatæ. *fig.* 3.

PISTILLUM: GERMEN obovatum; STYLI tres, patentes, ſubulati; STIGMATA minima, capitata. *fig.* 4.

PERICARPIUM: CAPSULA fuſca, trilocularis, trivalvis. *fig.* 5.

SEMINA plurima, minima, oblonga, nitidiuſcula. *fig.* 6.

ROOT perennial, ſomewhat creeping and fibrous.

STALK from a foot to a foot and a half in height, upright, branched, ſmooth, reddiſh, ſquare from having four little membranes or wings which run down the ſtalk.

LEAVES oppoſite, ſeſſile, ovate, obtuſe, ſmooth, of a deep green colour, paler underneath, ſtrongly marked with ſeven ribs, the whole ſurface covered with ſmall tranſparent dots, and the edge, eſpecially on the under ſide, dotted with black glands.

BRANCHES like the ſtalk, alternately oppoſite.

FLOWERS of a yellow colour, ſmall, growing on the tops of the branches in cloſe panicles.

BRANCHES of the panicle of a deep red or blood colour.

FLOWER-STALKS very ſhort.

CALYX: a PERIANTHIUM deeply divided into five ſegments, which are lanceolate, ſpreading, rib'd, entire, and free from glands. *fig.* 1.

COROLLA: five yellow PETALS, finely grooved, dotted on the edge with a few ſmall black glands. *fig* 2.

STAMINA: FILAMENTS numerous, ſcarcely divided into bodies or bundles; ANTHERÆ roundiſh, yellow, marked with a black gland. *fig.* 3.

PISTILLUM: GERMEN inverſely ovate; STYLES three, ſpreading, tapering; STIGMATA very ſmall, forming little heads. *fig.* 4.

SEED-VESSEL: a brown CAPSULE of three cavities and three valves. *fig.* 5.

SEEDS numerous, very ſmall, oblong, and ſomewhat ſhining. *fig.* 6.

The *Saint-John's-Worts* (at leaſt of this country) are a genus of plants which, having ſtrong characteriſtic marks, and being ſubject to little variation, give the Botaniſt no great trouble in their inveſtigation; it is ſufficient to ſay of this ſpecies for inſtance, that it has a ſquare ſtalk, and it is at once diſtinguiſhed from all the others.

CASPAR BAUHINE commits no ſmall error when he deſcribes the leaves of the *quadrangulum* as imperforate, the leaſt attention will ſhew the tranſparent dots on the leaves to be fully as numerous, if not ſo large as thoſe of the *perforatum*; the antient Botaniſts alſo abſurdly enough diſtinguiſhed this ſpecies from the others by the name of *Aſcyron*, or *Saint-Peter's-Wort*, but as it has no pretenſions to any generic diſtinction, we have dropped that name, as tending much to confuſe: and while we are cenſuring the faults of others, we ſhall mention an error of our own; in deſcribing the *Hypericum perforatum* we pointed out a little black gland viſible betwixt the lobes of the antheræ, as characteriſtic of that ſpecies, we now find the ſame on the *quadrangulum* alſo.

This ſpecies grows very plentifully by the ſides of rivulets, alſo in wet meadows. By the ſides of the ditches in *Batterſea Meadows* it is particularly common, and flowers in July.

It is ſeldom uſed in medicine, the *perforatum* ſupplying its place.

HOLCUS LANATUS. MEADOW SOFT-GRASS.

HOLCUS *Lin. Gen. Pl.* POLYGAMIA MONOECIA.

HERMAPHROD. *Cal.* Gluma 1 ſive 2 flora. *Cor.* Gluma ariſtata. *Stam.* 3. *Styli* 2. *Sem.* 1.

MASC. *Cal.* Gluma 2-valvis. *Cor.* 0. *Stam.* 3.

Raii Syn. Gen. 27. HERBÆ GRAMINIFOLIÆ FLORE IMPERFECTO CULMIFERÆ.

HOLCUS *lanatus* glumis bifloris villoſis: floſculo hermaphrodito mutico; maſculo ariſta recurva. *Lin. Syſt. Vegetab.* p. 760. *Sp. Pl.* 1485. *Fl. Suec.* n. 917.

AVENA diantha, floribus ovatis; perfecto mutico, imperfecto ariſtato. *Haller. hiſt.* n. 1484.

HOLCUS *lanatus.* *Scopoli Fl. Carn.* n. 1238.

GRAMEN pratenſe paniculatum molle. *Baub. pin.* 2.

GRAMEN miliaceum pratenſe molle. *Pet. Conc. Gr.* 224. *Raii Syn.* p. 404. Soft-tufted Meadow-Graſs.

Hudſon. Fl. Angl. ed. 2. p. 440. *Lightfoot. Fl. Scot.* p. 631.

RADIX perennis, fibroſa, minime repens.	ROOT perennial, fibrous, not at all creeping.
CULMI plures, bipedales, ſeu tripedales, raro ultra, erecti, quatuor communiter geniculis diſtincti, pubeſcentes, teretes, in quibuſdam locis ad baſin radicantes.	STALKS ſeveral, from two to three feet high, ſeldom higher, upright, generally furniſhed with four joints, downy, round, in ſome ſituation taking root at the bottom.
FOLIA pilis mollibus undique veſtita, incana, tres lineas lata, plana, ſuperne ſtriata, inferne carinata; *vagina* lineis purpureis externe notata, interne nitida; *membrana* obtuſa, externe piloſa, piliſque ciliata.	LEAVES covered on every part with ſoft hairs, which give them a greyiſh appearance, about three lines in breadth, flat, above ſtriated, below keeled, the *ſheath* marked externally with purple lines, internally ſhining; the *membrane* blunt, externally hairy, and edged with hairs.
PANICULA primo ſpiciformis, mollis, laxus, rubellus, parum nutans, dein erecta, diffuſa, albida.	PANICLE at firſt forms a kind of ſoft, looſe, reddiſh ſpike, which droops a little, afterwards becomes upright, ſpreading and whitiſh.
SPICULÆ bifloræ, albidæ, villoſulæ, verſus apicem coloratæ.	SPICULÆ containing two flowers, whitiſh, ſomewhat villous, coloured towards the top.
CALYX: *Gluma* bivalvis, valvula exteriore majore, trinerve, interiore mucronata, minore carinata. *fig.* 1. auct.	CALYX: *a Glume* of two valves, the outer one largeſt, having three ribs, and terminating in a point, the inner one ſmaller and keeled. *fig.* 1. magnif.
FLOS FERTILIS.	FERTILE FLOWER.
COROLLA bivalvis, valvulæ teneræ, virides, nitidæ, muticæ, valvulâ exteriore majore. *fig.* 2.	COROLLA compoſed of two valves which are tender, green, ſhining, and pointleſs, the outer valve largeſt. *fig.* 2.
STAMINA: FILAMENTA tria, capillaria; ANTHERÆ oblongæ, bifurcatæ, flavæ. *fig.* 5.	STAMINA: three capillary FILAMENTS; ANTHERÆ oblong, forked at each end, of a yellow colour. *fig.* 5.
PISTILLUM: GERMEN obovatum; STYLI duo, ad baſin uſque ramoſi. *fig.* 6.	PISTILLUM: GERMEN inverſely ovate; STYLES two, branched quite down to tbe bottom. *fig.* 6.
SEMEN parvum, acuminatum, nitidum glumis corollæ tectum. *fig.* 9. et valvulis calycis incluſum. *fig.* 8.	SEED ſmall, pointed, and ſhining, covered by the glumes of the corolla, *fig.* 9. and incloſed in the valves of the calyx. *fig.* 8.
FLOS STERILIS.	BARREN FLOWER.
COROLLA bivalvis, valvulæ minores, exteriore ariſtata, ariſta e dorſo valvulæ erumpente, longitudine valvulæ exterioris calycis. *fig.* 3, 4.	COROLLA compoſed of two valves, the valves ſmall, the outer one bearded, the awn ariſing from the back of the valve, the length of the outer valves of the calyx. *fig.* 3, 4.
STAMINA ut in fertili. *fig*, 5.	STAMINA as in the fertile flowers. *fig.* 5.
PISTILLUM: *Germen* ut in fertili, ſed multo minus; STYLI duo, ſubulati, ſimplices. *fig.* 7.	PISTILLUM: the *Germen* as in the fertile flower, but much leſs; STYLES two, tapering, and ſimple. *fig.* 7.
SEMEN minimum, abortivum.	SEED very minute and abortive.

The *Holcus Lanatus* abounds in moſt meadows, is frequently found by road-ſides, and ſometimes on walls, ſo that it will thrive in almoſt any ſituation. The redneſs of its panicle when juſt opening, joined to the ſoftneſs and hoarineſs of its leaves, render it a very conſpicuous graſs.

HALLER ſpeaks highly of it as food for cattle, calling it *optimum pabulum.* We cannot coincide with him in this opinion, nor do the generality of our intelligent farmers and graziers, who condemn it as too ſoft and woolly; nevertheleſs the ſeed of it (being eaſily collected) is ſometimes ſent up to *London* in great quantities, and ſold for pure graſs-ſeed: but it were better to lay down ground for meadow or paſturage in the uſual way, than fill it with this unprofitable, though pure graſs-ſeed.

Mr. LIGHTFOOT informs us in his *Fl. Scot.* that it is ſometimes uſed to make ropes for the fiſhing-boats.

It is a very diſtinct ſpecies from the *Holcus Mollis* (as we ſhall particularly explain when we treat of that graſs), and flowers in *June* and *July*.

One cannot but lament that LINNÆUS ſhould have ſeparated the *Holcus* from the other graſſes, with which it has ſo great an affinity, and have placed it among the plants of the claſs *Polygamia*, merely becauſe ſome of its flowers were imperfect; it frequently happening, as HALLER very juſtly obſerves, that the *Triticum*, *Hordeum*, and ſeveral other graſſes, are in the ſame predicament; and it was the leſs neceſſary here, as there is an evident piſtillum in the barren flowers, though an imperfect one. *Vid. fig.* 7.

Holcus lanatus.

PRUNELLA VULGARIS. [illegible]

Prunella vulgaris

PRUNELLA VULGARIS. SELF-HEAL.

PRUNELLA *Lin. Gen. Pl.* DIDYNAMIA GYMNOSPERMIA.

Filamenta bifurca: altero apice antherifero. *Stigma* bifidum.

Raii Syn. Gen. 14. SUFFRUTICES ET HERBÆ VERTICILLATÆ.

PRUNELLA *vulgaris* foliis omnibus ovato-oblongis ſerratis petiolatis. *Lin. Syſt. Vegetab.* p. 458. *Sp. Pl.* 837. *Fl. Suec.* 540.

BRUNELLA foliis ovatis oblongis calycibus ſuperne truncatis. *Haller. Hiſt.* n. 277.

BRUNELLA *vulgaris. Scopoli Fl. Carn.* 715.

PRUNELLA major folio non diſſecto. *Bauh. pin.* 260.

PRUNELLA *Gerard. emac.* 631.

PRUNELLA vulgaris. *Parkinſ.* 1680. *Raii Syn.* p. 238. Common Self-heal. *Hudſon. Fl. Angl. ed.* 2. p. 264. *Lightfoot Flor. Scot.* p. 321.

RADIX annua, fibroſiſſima.	ROOT annual, and exceedingly fibrous.
CAULIS dodrantalis, pedalis et ultra, erectus, ad baſin uſque ramoſus, geniculatus, geniculis inferioribus radicantibus, ſubquadratus, utrinque canaliculatus, hirſutus, purpuraſcens.	STALK from half a foot, to a foot or more in height, upright, branched quite down to the bottom, jointed, the lowermoſt joints ſending down roots, ſomewhat ſquare, with a deep groove on each ſide, rough and purpliſh.
RAMI cauli ſimiles, adſcendentes, alterne oppoſiti, inferioribus longioribus.	BRANCHES like the ſtalk, bending upward, alternately oppoſite, the lower ones longeſt.
FOLIA oppoſita, petiolata, ovata, plana, patentia, punctis prominulis ſcabriuſcula, obſolete dentata potius quam ſerrata.	LEAVES oppoſite, ſtanding on footſtalks, ovate, flat, ſpreading, rough with little prominent points, faintly indented on the edge, rather than ſawed.
PETIOLI ſuperne canaliculati, marginibus hirſutis.	LEAF-STALKS hollow above, and hairy on the edges.
SPICÆ terminales, ſeſſiles, ſubcylindricæ, pollicares, truncatæ, e floribus verticillatis breviter pedicellatis et bractæis conſtantes.	SPIKES terminal, ſeſſile, ſomewhat cylindrical about an inch in length, as if cut off at top, compoſed of floral leaves and flowers ſtanding on ſhort footſtalks.
BRACTEÆ cordatæ, latæ, acuminatæ, ſubdiaphanæ, venoſæ, ciliatæ, ſubtus hirſutæ, ſupra glabræ.	FLORAL-LEAVES heartſhaped, broad and pointed, ſomewhat tranſparent, veiny, edged with hairs, hirſute on the under ſide, ſmooth and ſhining above.
VERTICILLI ſexflori.	WHIRLS ſix flowers in each.
CALYX: PERIANTHIUM tubulatum, bractæis paulo longius, biangulatum, ſupra glabrum, trinerveum, ſubtus ſtriatum, angulis ciliatis, bilabiatum; labio ſuperiore depreſſo-plano, truncato, crenato, minutim tridentato, lateribus planis, inferiore anguſtiore, bifido, laciniis acuminatis. *fig.* 1.	CALYX: a tubular PERIANTHIUM, ſomewhat longer than the floral-leaves, angular on each ſide, ſmooth above, with three faint ribs, ſtriated below, the angles edged with hairs, compoſed of two lips, the uppermoſt of which is flat, and ſomewhat depreſſed, cut off at top, terminated by three ſmall teeth, the ſides flat, the lower lip narrower, bifid, the ſegments long and pointed. *fig.* 1.
COROLLA violacea, caduca, monopetala, ringens, pars tubuloſa calyce paulo longior, labium ſuperius concavum, integrum, ſuperne villoſum, inferius trifidum, laciniis lateralibus integris, deflexis, intermedia erecta, rotundata, denticulata. *fig.* 2.	COROLLA of a violet colour, eaſily falling, monopetalous and ringent, the tubular part a little longer than the calyx, the upper lip hollow, entire, and villous above, the lower lip divided into three ſegments, of which the ſide-ones are entire and bend downward, the middle one upright, round, and finely toothed. *fig.* 2.
STAMINA: FILAMENTA quatuor, ſubulata, violacea, bifurca, quorum duo breviora; ANTHERÆ bilobæ, lobis divergentibus, furcâ interiore inſidentes. *fig.* 3.	STAMINA: four FILAMENTS, tapering, of a violet colour, forked at top, of which two are longer than the others; ANTHERÆ compoſed of two lobes, which diverge and ſit on the inner fork. *fig.* 3.
PISTILLUM: GERMEN quadripartitum, glandulâ crenatâ cinctum; STYLUS filiformis, longitudine ſtaminum; STIGMA bifidum, acutum. *fig.* 4, 5, 6, 7.	PISTILLUM: GERMEN divided into four parts, ſurrounded by a notched gland; STYLE filiform, the length of the ſtamina; STIGMA bifid and pointed. *fig.* 4, 5, 6, 7.
SEMINA quatuor, ovata, parva, obtuſe angulata, glabra, fuſca, mucrone albo terminata. *fig.* 8.	SEEDS four, ovate, ſmall, obtuſely angular, ſmooth, brown, and terminated by a white point. *fig.* 8.

In many of the natural claſſes of plants, the ſeveral *genera* approximate ſo much, that it is difficult to find out a character which ſhall obviouſly diſtinguiſh them; ſuch a character is however afforded in the preſent plant. If the filaments are examined, each of them will be found forked at the extremity, and the anthera ſuſtained on the innermoſt diviſion of the fork; beſides this curious and uncommon ſtructure, the middle ſegment of the lower lip is finely toothed. This is noticed by TOURNEFORT in his figures of this genus, but the former wholly omitted. It did not however eſcape the penetrating LINNÆUS, who conſiders it as the eſſential character of the *Prunella*; nor is the calyx in this plant undeſerving of our attention, whether we conſider its ſtructure, or the ſingular manner in which it cloſes up to preſerve the feeds.

The *Self-heal* has an herbaceous roughiſh taſte, and hence ſtands recommended in alvine fluxes; it has been principally celebrated as a vulnerary, whence its name, and in gargariſms for apthæ, and inflammations of the fauces. *Lewis's Diſp.* p. 205.

It grows very commonly in meadows and paſtures, and flowers in June and July. Its bloſſoms, which are uſually of a violet colour, are ſometimes found white, and ſometimes red.

According to LINNÆUS's experiments, kine, goats, and ſheep, eat it; but horſes refuſe it.

SYMPHYTUM OFFICINALE. COMFREY.

SYMPHYTUM *Lin. Gen. Pl.* PENTANDRIA MONOGYNIA.
Corollæ limbus tubulato ventricoſus: fauce clauſa radiis ſubulatis.

Raii Syn. Gen. 13. HERBÆ ASPERIFOLIÆ.

SYMPHYTUM *officinale* foliis ovato-lanceolatis decurrentibus. *Lin. Syſt. Vegetab.* p. 158. *Sp. Pl.* 195. *Fl. Suec.* n. 165.

SYMPHYTUM *Haller. Hiſt.* n. 600.

SYMPHYTUM *Scopoli Fl. Carn.* n. 195.

SYMPHYTUM Conſolida major. *Bauh. pin.* 259.

CONSOLIDA major. *Gerard emac.* 806.

SYMPHYTUM majus vulgare. *Parkinſon* 523. *Raii Syn.* p. 230. Comfrey. *Hudſon. Fl. Angl.* ed. 2. p. 81. *Lightfoot Fl. Scot.* p. 134.

RADIX perennis, magna, ramoſa, extus nigricans, intus alba, ſubdulcenti-inſipida, ſucco tenaci glutinoſo abundans.	ROOT perennial, large, branched, on the outſide blackiſh, white within, maukiſh, abounding with a ſlimy juice.
CAULIS bipedalis, erectus, ramoſus, teres, ſubangulatus, ſcaber; pube rigida, recurva.	STALK about two feet high, upright, branched, round, yet ſlightly angular, rough; the hairs rigid and bending backwards.
FOLIA alterna, inferne petiolata, ſuperne ſeſſilia, decurrentia, ovata, acuta, ſpithamæa, etiam pedalia, parum rugoſa, venoſa, utrinque ſcabra, margine ſubundulata, ciliata.	LEAVES alternate, the lower ones ſtanding on footſtalks, the upper ones ſeſſile, decurrent, ovate, pointed, ſeven inches, or even a foot in length, ſomewhat wrinkly, veined, rough on both ſides, the edges ſlightly waved, and fringed with hairs.
FLORES ex albo-luteſcentes, raro purpurei, cernui, racemoſi, racemis plerumque geminis, involutis, multifloris.	FLOWERS of a yellowiſh white colour, rarely purple, drooping, placed on racemi or branches, which uſually grow two together, turn ſpirally inwards, and ſupport many flowers.
PEDUNCULI racemorum & florum teretes, hirſuti.	PEDUNCLES both of the racemi and flowers, round and very hairy.
CALYX: PERIANTHIUM monophyllum, villoſum, profunde quinquefidum: laciniis lanceolatis acutis, carinatis, erectis. *fig.* 1.	CALYX: a PERIANTHIUM of one leaf, hairy, deeply divided into five ſegments, which are lanceolate, keel'd and upright. *fig.* 1.
COROLLA infundibuliformis, ex luteo-alba, decidua; *Tubus* craſſus, longitudine calycis, apice extus notatus punctis quinque depreſſis, *fig.* 2; *limbus* ovatus, e tubo ſenſim ampliato, minutim quinquefidus, laciniis brevibus, rotundatis, revolutis; *faux* clauſa: ſquamis nectareis quinque lanceolatis, acutis, margine craſſis, ſerrulato-dentatis, conniventibus, corollâ brevioribus. *fig.* 4, 5.	COROLLA funnel-ſhaped, of a yellowiſh white colour, deciduous; the *tube* thick, the length of the calyx, marked externally at the top with five ſmall depreſſions; *fig.* 2. the *limb* ovate from the gradual widening of the tube, divided into five ſhort roundiſh ſegments, which are rolled back; the *mouth* cloſed with five long and pointed nectaries, thick at the edge, with numerous teeth-like points, cloſing at top, ſhorter than the corolla. *fig.* 4, 5.
STAMINA: FILAMENTA quinque, lanceolata, alba, breviuſcula; ANTHERÆ oblongæ, apice et baſi bifidæ, luteſcentes, erectæ, ſub ſquamis nectareis occultatæ. *fig.* 3.	STAMINA: five, lanceolate, white, ſhortiſh FILAMENTS; ANTHERÆ oblong, bifid both at top and at bottom, of a yellowiſh colour, upright, hid by the nectaries. *fig.* 3.
PISTILLUM: GERMEN quadripartitum: lobis ſubrotundis, obtuſis, viridibus; STYLUS ſubulatus, albus, inter lobos germinis ſurgens, corollâ paulo longior, apice obliquus; STIGMA parvum, obtuſum. *fig.* 6.	PISTILLUM: GERMEN divided into four lobes, which are roundiſh, blunt and green; STYLE tapering, white, ariſing from the middle betwixt the lobes, a little longer than the corolla, with a ſmall obliquity at top; STIGMA ſmall and blunt. *fig.* 6.
SEMINA quatuor in fundo calycis, majuſcula, angulata, nigricantia, nitida. *fig.* 7.	SEEDS four, in the bottom of the calyx, largiſh, angular, blackiſh and ſhining. *fig.* 7.

The *Comfrey* is a very common plant by river ſides, on the edges of wet ditches, and in other moiſt ſituations; it flowers from June to September.

Its bloſſoms are for the moſt part of a yellowiſh white colour, but in ſome parts of *England*, and abroad, they are more commonly purple.

As a medicinal plant the *Comfrey* has been held in high eſtimation, its conſolidating virtues have however been carried to a ridiculous exceſs; the roots, which are full of a glutinous juice, agree in quality with the roots of Marſh-mallow, and hence are recommended, internally, in ſpittings of blood, purgings, fluxes, and ulcers of the bladder; externally, by way of poultice to freſh wounds, fractured bones, bad ulcers, bruiſes, gouty ſwellings, &c.

A decoction of the powdered root, prepared in a particular manner, yields a fine ſcarlet colour. HELLOT *teinture*, p. 357.

It is generally left untouched by cattle. I know of no plant, that on being repeatedly cut down, produces ſuch a quantity of herbage.

Symphytum officinale.

Trifolium Glomeratum

TRIFOLIUM GLOMERATUM. ROUND-HEADED TREFOIL.

TRIFOLIUM *Lin. Gen. Pl.* DIADELPHIA DECANDRIA.

Flores ſubcapitati. *Legumen* vix calyce longius, non dehiſcens, deciduum.

Raii Syn. Gen. 23. HERBÆ FLORE PAPILIONACEO SEU LEGUMINOSÆ.

TRIFOLIUM *glomeratum* capitulis ſeſſilibus hemiſphæricis rigidis, calycibus ſtriatis patulis æqualibus. *Lin. Syſt. Vegetab.* p. 573. *Sp. Plant.* p. 1084.

TRIFOLIUM arvenſe ſupinum verticillatum. *Barr. ic.* 882.

TRIFOLIUM parvum rectum, flore glomerato cum unguiculis. *J. B.* II. 378.

TRIFOLIUM cum glomerulis ad caulium nodos rotundis. *Raii Syn. ed.* 3. p. 329. Knotted Trefoil, with round heads. *Hudſon. Fl. Angl. ed.* 2. p. 327.

RADIX annua, ſimplex, fibroſa.	ROOT annual, ſimple and fibrous.
CAULES plures, palmares, procumbentes, teretes, purpuraſcentes, glabri, ramoſi, geniculati, geniculis tumidiuſculis.	STALKS ſeveral from the ſame root, four or ſix inches in length, procumbent, round, purpliſh, ſmooth, branched and jointed; the joints a little ſwelled.
STIPULÆ caulinæ membranaceæ, acuminatæ, ramulorum apice ſæpius recurvis.	STIPULÆ of the ſtalk membranous and pointed, thoſe of the branches often bent back at top.
FOLIA glabra, viridia, macula alba ſæpius notata, minute ſerrata.	LEAVES ſmooth, green, often marked with a white ſpot, the edge finely ſawed.
FLORES glomerati, rubelli, axillares, capitulis ſeſſilibus, hemiſphæricis.	FLOWERS cluſtered, of a pink colour, growing in the alæ of the leaves, the little heads ſeſſile, and almoſt globular.
CALYX: PERIANTHIUM quinquedentatum, perſiſtens, læve, ſtriis decem coloratis notatum, dentibus ovato-acuminatis, patulis. *fig.* 1.	CALYX: a PERIANTHIUM having five teeth, permanent, ſmooth, marked with ten coloured ſtreaks, the teeth broad, pointed, and ſpreading. *fig.* 1.
COROLLA longitudine calycis; *vexillum* ſurſum curvatum; *alæ* vexillo duplo breviores, apice paululum ſecedentes; *carina* longitudine fere alarum. *fig.* 2.	COROLLA the length of the calyx; *ſtandard* bent upwards; *wings* about half as long as the ſtandard, ſeparating a little at their extremities; *keel* almoſt the length of the wings. *fig.* 2.
PERICARPIUM: LEGUMEN membranaceum, diſpermum, intra calycem. *fig.* 3.	SEED-VESSEL: a membranous POD, containing two ſeeds within the calyx. *fig.* 3.
SEMINA minima, flaveſcentia. *fig.* 4.	SEEDS very minute, and yellowiſh. *fig.* 4.

The bloſſoms of this ſpecies of *Trefoil* grow in little round balls or cluſters from the alæ of the leaves, and hence it has received its name of *glomeratum.*

It may be diſtinguiſhed from the *ſtriatum,* to which it bears ſome affinity, by being in every part ſmooth, in having its balls much rounder, and the teeth of the calyx ſpreading backward; its bloſſoms alſo are of a brighter red colour.

Not being a plant which ſtrikes the eye much at a diſtance, it is probably often overlooked; with us, however, it is certainly ſcarce. Mr. RAY found it about *Saxmundham* in *Suffolk*; Mr. DOODY about *Blackheath,* and near *Greenhithe*; Mr. HUDSON in the *Iſle of Shepey*; Mr. ROSE about *Norwich,* and Dr. GOODENOUGH on *Hanwell Heath.* I have found it on *Blackheath* for ſeveral years, yet not plentifully; it is fond of a gravelly ſituation, with ſome degree of moiſture; hence it muſt be looked for in the depreſſed parts of the heath. The plants growing near it were the *Trifolium ſtriatum, ornithopodioides,* and *Sagina procumbens*; and at no great diſtance *Callitriche autumnalis, Montia fontana,* and *Peplis Portula.*

It flowers in June.

RANUNCULUS REPENS. CREEPING CROWFOOT.

RANUNCULUS *Lin. Gen. Pl.* POLYANDRIA POLYGYNIA.

Cal. 5-phyllus. *Petala* 5 intra ungues poro mellifero. *Sem.* nuda.

Raii Syn. Gen. 15. HERBÆ SEMINE NUDO POLYSPERMÆ.

RANUNCULUS *repens* calycibus patulis, pedunculis ſulcatis, ſtolonibus repentibus, foliis compoſitis. *Lin. Syſt. Vegetab.* p. 430. *Fl. Suec.* n. 505. *Sp. Pl.* 779.

RANUNCULUS caule repente radicato, foliis ſemitrilobatis, lobis petiolatis. *Haller. Hiſt.* 1173.

RANUNCULUS repens. *Scopoli Fl. Carn.* n. 689.

RANUNCULUS pratenſis repens hirſutus. *Bauh. pin.* 179.

RANUNCULUS pratenſis repens. *Parkinſ.* 329.

RANUNCULUS pratenſis etiamque hortenſis. *Ger. emac.* 951. *Raii Syn.* p. 247. Common creeping Crowfoot, or Butter-cups. *Hudſon Fl. Angl. ed.* 2. p. 240. *Lightfoot Fl. Scot.* p. 292.

RADIX plurimis fibris albentibus conſtat.

CAULES ex una radice plerumque plures, pedales et ultra, variæ magnitudinis, pro ratione loci, teretiuſculi, hirſuti, repentes.

PETIOLI longi, hirſuti, ad baſin dilatati.

FOLIA plerumque utrinque hirſuta (etiam glabra occurrunt) maculis albis ſubinde notata, trilobata, lobis petiolatis, bi et tripartitis, lobulis acute dentatis.

RAMI floriferi erecti, ſæpius biflori.

PEDUNCNLI pubeſcentes, ſtriati.

CALYX: PERIANTHIUM pentaphyllum, foliolis ovatis, concavis, patentibus, piloſis, flaveſcentibus, margine membranaceis, deciduis. *fig.* 1.

COROLLA: PETALA quinque, obcordata, patentia, flava, interne nitida. *fig.* 2.

NECTARIUM: *Squamula* parva, rotundata, ad baſin cujuſvis petali. *fig.* 3.

STAMINA: FILAMENTA plurima, ultra triginta, receptaculo inſerta, apice paululum dilatata; ANTHERÆ olongo-lineares, compreſſæ, incurvatæ, flavæ. *fig.* 4.

PISTILLUM: GERMINA plurima, in capitulum collecta, compreſſa, erecta; STYLIS brevibus, acuminatis, apice reflexis terminati; STIGMATA ſimplicia. *fig.* 5.

SEMEN compreſſum, læve, mucronatum. *fig.* 6.

ROOT conſiſts of numerous whitiſh fibres.

STALKS generally ſeveral from one root, a foot or more in length, varying in ſize according to the place of growth, roundiſh, beſet with rough hairs, and creeping.

LEAF-STALKS long, hairy and dilated at the baſe.

LEAVES generally hairy on both ſides (ſometimes they are found ſmooth and ſhining) frequently marked with white ſpots, compoſed of three lobes, or ſmaller leaves which have footſtalks, theſe are divided into two or three ſegments, and ſharply notched.

FLOWER-BRANCHES upright, generally ſupporting two flowers.

FLOWER-STALKS downy and ſtriated.

CALYX: a PERIANTHIUM of five leaves, which are ovate, concave, ſpreading, hairy, yellowiſh, membranous at the edge, and deciduous. *fig.* 1.

COROLLA: five PETALS, inverſely heart-ſhaped, ſpreading, yellow, ſhining on the inſide. *fig.* 2.

NECTARY a ſmall roundiſh *Scale* at the baſe of each petal. *fig.* 3.

STAMINA: FILAMENTS numerous, upwards of thirty, inſerted into the receptacle, dilated a little at top; ANTHERÆ oblong and ſomewhat linear, flattened, bent inward, and yellow. *fig.* 4.

PISTILLUM: GERMINA numerous, collected into a little head, flattened and upright; terminated by ſhort, pointed STYLES, which turn back at top, STIGMATA ſimple. *fig.* 5.

SEED flat, ſmooth, with a ſmall point. *fig.* 6.

The *Ranunculus bulboſus* is a very noxious plant in dry paſtures, as the *acris* is in the moiſt, and ſome of the beſt meadows about town; but where the *repens* abounds, it is more miſchievous than either of thoſe, and it is a plant ſo general in its growth, that few meadows or paſtures are entirely free from it; it differs from the other two Crowfoots, in having ſtalks which run along the ground, and at every joint ſending forth roots, and being a plant that will thrive in almoſt any ſoil, it is very apt to become the principal plant of the paſturage, to the great detriment of the farmer, as cattle in general have the greateſt averſion to the Crowfoots.

From the aſtoniſhing diverſity of ſoil and ſituation in which this plant is found, the varieties which it aſſumes are almoſt endleſs; by the Thames ſide it will grow three or four feet high, with a ſtem nearly as large as one's thumb; in barren, gravelly fields, it is entirely procumbent, with a ſtalk not larger than a ſmall wheat ſtraw, but in all its various ſtates I have ever found it to have a creeping ſtalk, and this is a character which it does not loſe by cultivation. HALLER, miſled by his pupil WILLICH*, who ſince has retracted his error, ſuſpected it to be a variety of the *bulboſus*, but the *bulboſus* was never known to creep, this does wherever its ſtalk can touch the ground.

Its principal time of flowering is in the month of June, but it may be found in bloſſom during moſt of the remaining ſummer months.

Like the *acris* and *bulboſus* it is ſometimes found double, but more rarely.

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* XXXV *Ranunculum bulboſum* non in *repentem* mutari, ut in *Obſervationibus Botanicis* a. 1747. p. 4. ſcripſeram, nuperiores obſervationes docuerunt. Utraque planta diverſitates ſuas conſtantes retinet, ab ILL. LINNÆO nominibus ſpecificis optime expreſſas. *Obſervat. de plant. quibuſd. Gotting.* 1762.

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Sansom Sculp.

Ranunculus repens

Antirrhinum Orontium.

ANTIRRHINUM ORONTIUM. SMALL SNAPDRAGON.

ANTIRRHINUM *Lin. Gen. Pl.* DIDYNAMIA ANGIOSPERMIA.

Cal. 5-phyllus. *Corollæ* baſis deorſum prominens, nectarifera. *Capſula* 2-locularis.

Raii Syn. Gen. 18. HERBÆ FRUCTU SICCO SINGULARI FLORE MONOPETALO.

ANTIRRHINUM *Orontium* corollis ecaudatis, floribus ſubſpicatis, calycibus corolla longioribus. *Lin. Syſt. Vegetab.* p. 466. *Sp. Pl.* p. 860. *Fl. Suec.* n. 559.

ANTIRRHINUM foliis ellipticis obtuſis, floribus ſparſis, calycibus ſubulatis longiſſimis, calcare breviſſima. *Haller. Hiſt.* n. 334.

ANTIRRHINUM *Orontium. Scopoli Fl. Carn.* n. 774.

ANTIRRHINUM anguſtifolium ſylveſtre. *Bauh. Hiſt.* III. 464.

ANTIRRHINUM arvenſe majus. *Bauh. pin.* 212.

ANTIRRHINUM ſylveſtre medium. *Parkinſ.* 1334. *Raii Syn.* p. *283. The leſſer wild Calf's Snout or Snapdragon. *Hudſon. Fl. Angl. ed.* 2. p. 274.

RADIX annua, ſimplex, rigida, albida, fibroſa, fibris paucis, patentibus.	ROOT annual, ſimple, ſtiff, whitiſh, fibrous, fibres few and ſpreading.
CAULIS ſpithamæus, aut pedalis, ſimplex ſeu ramoſus, erectus, teres, piloſus, pilis patentibus, ſubviſcidis.	STALK from a ſpan to a foot in height, ſimple or branched, upright, round, hairy, the hairs ſpreading and ſomewhat viſcid.
FOLIA ima oppoſita, ſubconnata, ſuperiora alterna, lineari-lanceolata, carinata, deflexa, integerrima, hirſutula.	LEAVES of a ſhape betwixt linear and lanceolate, keeled, turning downward, entire at the edge, ſlightly hairy, the lowermoſt oppoſite, ſlightly uniting at the baſe, the uppermoſt alternate.
FLORES pauci, axillares, ſeſſiles, rubelli, vix ſpicati, niſi in ſpeciminibus majoribus.	FLOWERS few, growing from the alæ of the leaves, ſeſſile, of a bright red colour, ſcarcely forming a ſpike, unleſs in large ſpecimens.
CALYX: PERIANTHIUM quinque-partitum, perſiſtens, laciniis linearibus, carinatis, hirſutis, longitudine corollæ, ſuperiore longiore.	CALYX: a PERIANTHIUM deeply divided into five ſegments, and permanent; the ſegments linear, keeled, hairy, the length of the corolla, the uppermoſt ſegment longeſt.
COROLLA monopetala, roſea, venis ſaturatioribus ſtriata, inferne et ſuperne pubeſcens; *labium* ſuperius bifidum, lateribus reflexum, inferius trifidum, laciniis deflexis, intermedia minore, *Nectarium* breviſſimum, obtuſum. *fig.* 1.	COROLLA monopetalous, roſe coloured, ſtriped with veins of the ſame colour but deeper, both above and below ſlightly hairy, the upper lip bifid, the ſides turning back, the lower lip trifid, the ſegments turning down, the middle one the ſmalleſt; *Nectary* very ſhort and blunt. *fig.* 1.
STAMINA: FILAMENTA quatuor, filiformia, purpuraſcentia, glabra, quorum duo breviora; ANTHERÆ flavæ, bilobæ, conniventes. *fig.* 2.	STAMINA: four FILAMENTS, thread-ſhaped, purpliſh, ſmooth, two of which are ſhorter than the others; ANTHERÆ yellow, cloſing together, compoſed of two lobes. *fig.* 2.
PISTILLUM: GERMEN ſubrotundum, villoſum; STYLUS ſubulatus, villoſus, apice paululum inclinatus; STIGMA obtuſum, flavum. *fig.* 3.	PISTILLUM: GERMEN roundiſh, and villous; STYLE tapering, villous, bending a little downward at top; STIGMA blunt and yellow. *fig.* 3.
PERICARPIUM: CAPSULA pedunculata, erecta, hirſuta, apice triforaminoſa, bilocularis. *fig.* 4.	SEED-VESSEL: a CAPSULE ſtanding on a footſtalk, upright, hairy, having two cavities and three apertures at top. *fig.* 4.
SEMINA plurima, nigricantia, angulata. *fig.* 5.	SEEDS numerous, blackiſh and angular. *fig.* 5.

This ſpecies of *Antirrhinum* is diſtinguiſhed from all the others, the *majus* excepted, by having no ſpur to the corolla, and from the *majus* by being an annual, and having long, pointed leaves to the calyx, which in that plant are ſhort and obtuſe.

It grows in tolerable plenty in Batterſea Corn-fields, where it flowers in July and Auguſt.

The ſeed-veſſel, when fully ripe, is a curious repreſentation of the ſkull of a Quadruped.

AGARICUS PROCERUS. TALL MUSHROOM.

AGARICUS *Lin. Gen. Pl.* CRYPTOGAMIA FUNGI.

Fungus horizontalis, ſubtus lamelloſus.

Raii Syn. Gen. 1. FUNGI.

AGARICUS *anulatus* ſtipitatus, pileo campanulato ſubfuſco ſquamoſo, lamellis albidis, ſtipite bulboſo anulato. *Lightfoot Fl. Scot.* p. 1025.

AGARICUS *procerus* ſtipitatus pileo hemiſphærico lacerato-ſquamoſo rufeſcente cinereo, lamellis albis, ſtipite longo cylindrico acetabulo inſerto. *Hudſon Fl. Angl. ed.* 2. p. 612.

AGARICUS *procerus. Scopoli Fl. Carn.* n. 1465.

AMANITA petiolo procero, anulato, in acetabulum pilei immiſſo, pileo ſquamoſo et maculato, lamellis albis. *Haller: Hiſt.* n. 2371.

AGARICUS; pileo papillari, ampliſſimo, in margine fornicato, lacero et filamentoſo; petiolo anulato procero, inferius tumido, pilei acetabulo inſerto. *Gleditſch. Fung.* p. 114.

FUNGUS pileolo lato, longiſſimo pediculo variegato. *C. B. Pin.* 371. n. 24.

FUNGI longiſſimo pediculo candicantes, ſed maculati eſculenti. *J. B.* III. 826. *Raii Syn.* p. 3. n. 10. *Schæff. Fung.* t. 22, 23.

STIPES ſolitarius, ſpithamæus, et ultra, craſſitie indicis, baſi bulboſus, fiſtuloſus, *fig.* 3, albidus, ſquamis fuſcis plerumque notatus.	STALK ſingle, ſix inches or more in height, the thickneſs of the forefinger, bulbous at bottom, hollow, *fig.* 3, whitiſh, and generally mottled with brown ſcales.
VOLVA ampla, perſiſtens, lacera, bilamelloſa, lamella inferiore membranacea, ſubfuſca, ſuperiore alba, ſpongioſa.	RUFFLE large, permanent, torn, compoſed of two lamellæ or coats, the lowermoſt membranous, and browniſh, the uppermoſt white and ſpongy.
PILEUS palmaris et ultra, primo ſubgloboſus, dein campanulatus, demum planus, ſquamis fuſcis, floccidis, circa verticem crebrioribus, maculatus; vertex tumidus, coriaceus; caro craſſitie lamellarum, alba, molliſſima, ſpongioſa.	CAP three inches and more in diameter, at firſt roundiſh, then bell-ſhaped, and laſtly flat, ſpotted with brown, flaky, ſcales; thickeſt round the crown; crown prominent and leathery, fleſh the thickneſs of the gills, white, very ſoft and ſpongy.
LAMELLÆ confertæ, fragiles, albidæ, baſi in marginem acetabuli pilei inſertæ, pulverem ſubtiliſſimum cineraſcentem ſpargentes. *fig.* 1, 2.	GILLS numerous, brittle, whitiſh, inſerted at their baſe into the edge of the cup of the cap, throwing out a very fine aſh-coloured powder. *fig.* 1, 2.

This Muſhroom, inferior to few in point of elegance, is frequently found in Woods, and dry hilly Paſtures among Heath, Broom, &c. in the months of September and October; I have found it in the environs of *Hornſey Wood*, and *The Spaniard*, *Hampſtead Heath*; in *Richmond Park*, and many other places.

It is a well-known Muſhroom, and eaſily diſtinguiſhed from all others by its tallneſs, its bulbous baſe, its large ruffle, its ſpongy cap, which is flaky, or ſcaly, not warty at top, and which, as Mr. LIGHTFOOT juſtly obſerves, ſeparates it from the *verrucoſus*, with which it has no ſmall affinity.

I have ſeen it expoſed to ſale in Covent Garden market, for the true eatable one, but a Connoiſſeur will diſtinguiſh it by the ſpongineſs of its fleſh, which renders it in a great degree unfit for eating.

Agaricus Procerus

Phallus caninus.

PHALLUS CANINUS. RED-HEADED MORELL.

PHALLUS *Lin. Gen. Pl.* CRYPTOGAMIA FUNGI.

Fungus ſupra reticulatus, ſubtus lævis.

Raii Syn. Gen. FUNGI.

PHALLUS *caninus* volvatus, ſtipitatus, ſtipite celluloſo, capitulo impervio, rubro, rugoſo.

PHALLUS exilis Marattæ. *Batarr. Fung.* p. 7. t. 40. F. ?

PHALLUS *caninus* volvatus ſtipitatus, pileo rubro celluloſo acuto, apice clauſo. *Hudſon. Fl. Angl. ed.* 2. p. 630.

VOLVA magnitudine nucis moſchatæ, oblongo-ovata, alba, lævis, intus gelatinoſa, tunicâ interiore ſuperne truncatâ, *fig.* 1, 2.

STIPES extra volvam, ſeſquiuncialis, ſeu biuncialis, magnitudine calami anſerini majoris, teres, filiformis, inferne acuminatus, celluloſus, ſubpellucidus, pallide aurantiacus, intus cavus, cito flacceſcens. *fig.* 3, 4, 5, 6.

CAPITULUM, nam pileus vix dici poteſt, ſtipiti inſidet, eſtque ſeſſile, ſemunciale, diametro ſtipitis, oblongum, ſubacuminatum, apice impervio albeſcente, primo lividum, membranâ nitidâ, tenuiſſimâ tectum, infra quam exigua quantitas humoris vireſcentis, ſeu materies ſeminalis fere inodori cernitur, quâ remotâ ſuperficies capituli rubra et tranſverſim rugoſa apparet, nequaquam vero celluloſa, ſicut in impudico.

VOLVA, or egg, the ſize of a nutmeg, of an oblong, ovate ſhape, white, ſmooth, gelatinous within, the inner coat cut off at top. *fig.* 1, 2.

STALK, beyond the volva, an inch and a half or two inches in length, the ſize of a large gooſe-quill, round, filiform, terminating in a point at bottom, cellular, ſomewhat tranſparent, of a pale orange colour, hollow within, ſoon becoming flaccid. *fig.* 3, 4, 5, 6.

HEAD, for it cannot properly be called a cap, ſits on the ſtem, is ſeſſile, about half an inch in length, and of the diameter of the ſtem, oblong, a little pointed, impervious and whitiſh at top, at firſt of a livid colour, and covered with a very thin, ſhining membrane, underneath which is a ſmall quantity of a greeniſh liquid, or ſeminal matter, almoſt ſcentleſs, which being removed, the ſurface of the head appears of a red colour, and tranſverſely wrinkled, but by no means cellular, as in the ſtinking Morell.

Mr. EHRET, the celebrated botanic painter, appears to have been the firſt who diſcovered this rare Fungus in this country; he found it in a wood near *Salop**, and made drawings of it for one of his principal patrons. Mr. HUNTER, gardener to the Earl of MANSFIELD, lately found it, though very ſparingly, in *Caen Wood*, and communicated ſeveral ſpecimens of it to Mr. DICKSON of Covent Garden. This autumn 1781, on the 20th of September, I was fortunate enough to be preſent at the diſcovering of one of them in Lord MANSFIELD's ſmall Pine wood, famous for producing the *Phallus impudicus*, *Hydnum auriſcalpium*, and other Fungi; I was in ſearch of theſe, when my draughtſman Mr. SOWERBY pointed out to me a white ſubſtance, riſen a little above the ſurface of the ground, and which at a diſtance reſembled the cap of a ſmall white muſhroom; not ſuſpecting it to be any thing extraordinary, I took it up with leſs caution than I ſhould otherwiſe have done, and on opening it found it to be the *Phallus caninus*, in the ſtate repreſented at *fig.* 1. From the haſty manner in which it was gathered, I had no opportunity of obſerving whether its roots were ſimilar to thoſe of the *Phallus impudicus*, but ſuſpect they were; on examining it the next morning I was pleaſed to find that the ſtalk had ſhot out from its incloſing volva more than an inch; the volva contained a jelly in the manner of the *impudicus*, in paſſing through which, the ſtalk became covered with it, (this is prevented from taking place in the *impudicus*, becauſe the pileus is much wider than the ſtalk) the ſtalk was cellular and hollow, equally rapid in its growth as the *impudicus*, but as its baſe contained within the volva ran out to a finer point, ſo the body of it was more uniformly of a ſize throughout, and of a faint orange colour; not having that firm waxy texture which enables the *impudicus* to ſupport itſelf for many days, it quickly became flaccid after attaining its full growth.

Thus far we may obſerve a great ſimilarity in the ſtructure and œconomy of the two plants we have been comparing; in the remaining part, containing the fructification, we find an amazing difference. The *Phallus impudicus* carries on the top of the ſtalk a very diſtinct and perfect Pileus, or Cap, on the outſide of which the ſeminal matter is depoſited in cells, without the leaſt covering; in the *caninus* there is properly ſpeaking no Pileus, the part on the outſide of which the ſeminal matter is lodged, forms a capitulum, or head, which is only a continuation of the ſtalk, as appears on diſſection, differing in its ſtructure and colour, this head has a *wrinkled*, not a *reticulated* ſurface, within theſe wrinkles, which are not very deep, the ſeminal matter is contained, and (contrary to what we find in the *impudicus*) covered by a very thin membrane; we may obſerve that this matter has very little ſmell in it, nor do flies appear particularly fond of it.

This unuſual ſtructure of the capitulum by no means agrees with LINNÆUS's generic character of a *Phallus*, as that implies a *Pileus ſmooth on the under, and reticulated on the outer ſide*, with which the *impudicus* perfectly correſponds, and yet every botaniſt would call this a *Phallus*; hence there appears a neceſſity for altering its generic character, the eſſence of which ſeems to conſiſt in the *Seeds being contained in a jelly-like liquifying ſubſtance, on the outſide of a Capitulum* or *Pileus*.

BATARRA's figure and deſcription may poſſibly be intended for this Fungus, there is no knowing with certainty, ſo great is their obſcurity.

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* In the margin of a Ray's Synopſis which had been Mr. Ehret's, belonging to Mr. Richard Haworth, Apothecary of Chancery-lane, who kindly lent it me, there is the following remark at the Phallus impudicus, in Mr. Ehret's own hand writing: "a ſmaller ſort found in a wood "near Salop, with Mr. Moore 1741, but it did not ſtink."

Orobanche major.

OROBANCHE MAJOR. COMMON BROOM-RAPE.

OROBANCHE *Lin. Gen. Pl.* DIDYNAMIA ANGIOSPERMIA.

Cal. bifidus. *Cor.* ringens. *Caps.* unilocularis, bivalvis, polyſperma. *Glandula* ſub baſi germinis.

Raii Syn. Gen. 18. HERBÆ FRUCTU SICCO SINGULARI FLORE MONOPETALO.

OROBANCHE *major* caule ſimpliciſſimo pubeſcente, ſtaminibus ſubexſertis. *Lin. Syſt. Vegetab.* p. 497. *Spec. Pl.* p. 882. *Fl. Suec.* n. 561.

OROBANCHE caule ſimplici, ſtipula unica, calyce quadrifido. *Haller. Hiſt.* 295.

OROBANCHE *major.* *Scopoli Fl. Carn.* n. 782.

OROBANCHE major Garyophyllum olens. *Bauh. pin.* 87.

RAPUM Geniſtæ *Ger. emac.* 1311. *Parkinſ.* 229. *Raii Syn.* p. *288. Broom-rape. *Hudſon. Fl. Angl. ed.* 2. p. 266. *Lightfoot Flor. Scot.* p. 332.

RADIX Spartii ſcoparii radicibus plerumque adnaſcitur.	ROOT generally grows to the roots of the common Broom.
CAULIS pedalis ad ſeſquipedalem, erectus, ſimplex, fiſtuloſus, teretiuſculus, ſulcato-ſtriatus, villoſus, purpuraſcens, ſquamis ſparſis, marcidis, tectus, ad baſin bulboſus, bulbo ſquamoſo.	STALK from a foot to a foot and a half in height, upright, ſimple, hollow, roundiſh, ſomewhat channeled, villous, of a purpliſh colour, covered with withered ſquamæ, bulbous at bottom, the bulb ſquamous.
FLORES ſpicati, ſeſſiles, purpuraſcentes plerumque, aliquando etiam flaveſcentes, ſpica primo acuta, dein ſubcylindrica.	FLOWERS growing in ſpikes, ſeſſile, for the moſt part purpliſh, ſometimes alſo yellowiſh, the ſpike is at firſt pointed, and then becomes cylindrical.
CALYX: PERIANTHIUM monophyllum, erectum, quadrifidum, poſtice ad baſin uſque diviſum, et antice magis profunde quam ad latera, villoſum, albeſcens, laciniis ſeu dentibus ſubæqualibus, ferrugineis. *fig.* 1.	CALYX: a PERIANTHIUM of one leaf, upright, divided into four ſegments, poſteriorly quite down to the baſe, and anteriorly more deeply that at the ſides; villous, whitiſh, the ſegments or teeth nearly equal, and ferruginous. *fig.* 1.
COROLLA: monopetala, ringens, plerumque purpuraſcens, ad ferrugineum colorem accedens, perſiſtens; *tubus* inclinatus, amplus, ventricoſus; *faux* hians; *labium ſuperius* concavum, obſolete trifidum, ſubcarinatum, externe viſcidum; *labium inferius* trifidum, lacinulâ mediâ productiore, concava. *fig.* 2.	COROLLA monopetalous, ringent, generally purpliſh, approaching to the colour of ruſty iron; *tube* bending downward, large, bellying out; *mouth* gaping; *upper-lip* hollow, obſoletely trifid, ſomewhat keeled, and externally viſcid; the lower lip trifid and hollow, the middle ſegment the longeſt. *fig.* 2.
STAMINA: FILAMENTA quatuor, ſubulata, alba, ſub labio ſuperiore recondita, quorum duo longiora; ANTHERÆ leviter cohærentes, ſtramineæ, didymæ, ovatæ, mucronibus terminatæ. *fig.* 3.	STAMINA: four FILAMENTS, tapering, white, hid under the upper lip, two of which are longer than the reſt; ANTHERÆ ſlightly cohering, of a ſtraw colour, double, ovate, each cavity terminating in a point. *fig.* 3.
PISTILLUM: GERMEN oblongum, baſi antice tribus glandulis, protuberantibus, flavis, melleum liquorem copioſe fundentibus, notatum; STYLUS pubeſcens, ſtaminibus paulo longior, purpuraſcens, apice inflexus; STIGMA ſemibifidum, obtuſum, craſſiuſculum, flavum. *fig.* 4.	PISTILLUM: GERMEN oblong, marked anteriorly at the baſe with three protuberant yellow glands, which pour forth plentifully a ſweet liquor; STYLE downy, a little longer than the ſtamina, purpliſh, bent down at top; STIGMA half-divided, obtuſe, thickiſh, and yellow. *fig.* 4.
PERICARPIUM: CAPSULA ovato-oblonga, acuminata, unilocularis, bivalvis. *fig.* 5.	SEED-VESSEL an ovate, oblong *capſule*, terminating in a point, of one cavity and two valves. *fig.* 5.
SEMINA numeroſa, minima; *receptacula* quatuor, linearia, lateralia, adnata. *fig.* 6, 7.	SEEDS numerous and very ſmall; *receptacles* four, linear, growing to the ſides of the capſule. *fig.* 6, 7.

The literal Engliſh tranſlation of the Greek word *Orobanche* is *Strangle-tare**: this term has been given by DIOSCORIDES to one plant, and by THEOPHRASTUS to another; ours is undoubtedly the *Orobanche* of DIOSCORIDES, (as it accords with his deſcription †), and alſo of PLINY. The *Orobanche* of THEOPHRASTUS muſt have been ſome

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* ΟΡΟΒΑΓΧΗ, *Ervangina Gazæ, quòd ὄροβον ἄγχει, ervum ſtrangulet, dicitur.*

† "Orobanche cauliculus eſt ſeſquipedalis, et interdum major, ſubruber, hirſutus, tener, ſine folio, pinguis: flore ſubalbido, aut in luteum "vergente: radice digiti craſſitudine, et cum ariditate flacceſcit caulis, fiſtuloſa. Hanc inter quædam legumina naſci conſtat, et ea ſtrangulare, "unde Orobanche ſibi cognomentum uſurpavit. Eſtur, ut olus, cruda, et in patinis, aſparagi modo, decocta. Legumentis addita, concoctionem accelerare creditur." *Matth. ex Dioſc.*

climbing plant, as is evident from his words, which are thus quoted by Matthiolus, "Ervum necat amplexu "complexuque ſuo," whereas the *Orobanche* of Dioscorides, according to the ſame author, by its preſence only, "ſuâ tantum preſentiâ," deſtroys the Legumina, Corn, Hemp, and Flax which grow near it, and from which property of choaking and devouring the neighbouring plants, Matthiolus ſays they called it in ſome parts of Italy the *Wolf plant*; its pernicious effects in this reſpect are confirmed by a later Italian writer Micheli, who mentions its being proſcribed in Tuſcany by public edict.

The moſt remarkable circumſtance in the œconomy of this plant, is its growing from the roots of others; Caspar Bauhine aſſerts, that it is always attached to the fibres *(fibris)* of ſome plant near it; ſeveral of my botanic friends are of opinion that it is not paraſitical in all ſituations, eſpecially in corn-fields, but they have not confirmed their opinions by actual and repeated examinations, which are ſtill wanting. The plants from the roots of which Casp. Bauhine obſerved it to grow were the *Spartium Scoparium*, common Broom, *Geniſta tinctoria*, Woodwaxen, *Hieracium ſubaudum*, ſhrubby Hawkweed, *Trifolium*, Trefoil, (no particular ſpecies is mentioned), and *Orobus tuberoſus*, Wood Pea; all of theſe (one excepted) are leguminous plants, to which it is obſerved to have the ſtrongeſt attachment; I have met with it but rarely about London, excepting one ſpot, in which it might be ſaid truly to abound; this was a ſmall, hilly, barren field, covered partly with furze and broom, on the left-hand ſide of the road, within about two miles of Kingſton, Surry, about half a mile beyond the Robin Hood and Turnpike, in which field the Botaniſt will find ſeveral other rare plants. I have alſo ſeen it on Hampſtead Heath, and on the borders of Charlton Wood; in theſe ſeveral ſituations it grew either out of the roots of Broom or Furze, but chiefly the former. My late gardener Robert Squibb once brought me out of Surry a very ſtrong plant of *Orobanche*, which had grown in a corn field on the root of the *Centaurea Scabioſa*: I planted both roots in my garden, in the ſituation they were found; the *Knapweed* grew, but the *Broom-rape* died. Several perſons have informed me of their having found it to be paraſitical on the roots of *Clover*, in particular Dr. Goodenough and Mr. Ruggles of Cobham; Mr. Thomas White once related to me his having obſerved a ſmall Orobanche growing on walls, &c. in Pembrokeſhire, and that the decayed floor of an old caſtle in particular was almoſt covered with it; he alſo noticed, that in ſome of the weſtern counties this plant was ſo common as to give the mowers cauſe of complaint.

The *Orobanche* appears to vary in ſize according to the ſize of the root it grows on, the ſtem being ſometimes almoſt as thick as one's thumb, and at other times not much larger than a wheat-ſtraw; the flowers vary much in their colour, but are moſtly dead-purple or yellowiſh.

The ſeed of this plant is remarkably ſmall, hence it will be extremely difficult to ſhew its vegetation by experiment, more eſpecially as it requires a very particular ſoil and ſituation, yet no one can doubt but the plant is propagated thereby; it muſt firſt vegetate on the earth, then the radicle, which is ſent downward, finding a proper root, attaches itſelf to it, quits its parent earth, and becomes paraſitical.

It has a faint ſmell of cloves, and is ſaid to be a ſtrong aſtringent and uſeful vulnerary.

Linnæus remarks that *Sweden* is too cold for it to flouriſh with them.

Parietaria officinalis

PARIETARIA OFFICINALIS. PELLITORY OF THE WALL.

PARIETARIA *Lin. Gen. Pl.* POLYGAMIA MONOECIA.

HERMAPHROD. *Cal.* 4-fidus. *Cor.* 0. *Stamina* 4. *Styl.* 1. *Sem.* 1. ſuperum, elongatum.
FEM. *Cal.* 4-fidus. *Cor.* 0. *Stam.* 0. *Stylus* 1. *Sem.* 1. ſuperum, elongatum.

Raii Syn. Gen. 5. HERBÆ FLORE IMPERFECTO SEU STAMINEO VEL APETALO POTIUS.

PARIETARIA *officinalis* foliis lanceolato-ovatis, pedunculis dichotomis, calycibus diphyllis. *Lin. Syſt. Vegetab.* p. 763. *Sp. Pl.* p. 1492.

PARIETARIA foliis elliptico-lanceolatis, hirſutis. *Haller. Hiſt.* p. 162.

PARIETARIA *officinalis. Scopoli Fl. Carn.* n. 1242.

PARIETARIA officinarum et Dioſcoridis. *Bauh. pin.* 121.

HELXINE *Camerar. Epit.* p. 849.

PARIETARIA *Ger. emac.* 331. vulgaris *Parkinſ.* 437. *Raii Syn.* p. 158. Pellitory of the Wall. *Lightfoot Fl. Scot.* p. 635. *Hudſon Fl. Angl. ed.* 2. p. 442. *Oeder Fl. Dan. t.* 521.

RADIX perennis, ſublignoſa, *rubens*, fibroſa.	ROOT perennial, ſomewhat woody, *of a red colour*, and fibrous.
CAULES plures, ſubereƈti, dodrantales, pedales et ultra, ramoſiſſimi, teretes, ſtriati, ſolidi, rubentes, pubeſcentes; *rami* cauli ſimiles, alterni, diffuſi.	STALKS ſeveral, nearly upright, from nine inches to a foot or more in height, very much branched, round, ſtriated, ſolid, reddiſh, and downy; *branches* like the ſtalks, alternate and ſpreading.
FOLIA alterna, petiolata, ovata, acuta, utrinque attenuata, integerrima, patentia, ad margines et venas ſubtus præcipue pubeſcentia, ſupra ſaturate viridia, lucida, ſubrugoſa, punƈtis prominulis adſperſa.	LEAVES alternate, ſtanding on foot-ſtalks, ovate, pointed, tapering towards each extremity, entire at the edge, ſpreading, particularly downy at the edge and on the veins of the under-ſide, on the upper-ſide of a deep green colour, ſhining, ſomewhat wrinkled, and covered over with ſmall prominent points.
PETIOLI longitudine fere diametri foliorum, pubeſcentes, ſupra canaliculati.	LEAF-STALKS nearly the length of the diameter of the leaves, downy, hollowed above.
FLORES parvi, herbacei, hirſuti, ſeſſiles, in axillis foliorum conglomerati, hermaphroditi et feminei.	FLOWERS ſmall, of a greeniſh colour, rough, ſeſſile, growing in cluſters in the alæ of the leaves, hermaphrodite and female.
Hermaphroditi Flores duo continentur *involucro* heptaphyllo, perſiſtente, foliolis ovatis, acutis planis, hirſutis, hirſutie glanduloſâ. *fig.* 1.	Two *Hermaphrodite Flowers* are contained in an *involucrum* compoſed of ſeven leaves, and permanent, the leaves ovate, pointed, flat, hirſute, the hairs glandular at the extremities. *fig.* 1.
CALYX: PERIANTHIUM monophyllum, quadrifidum, planum, perſiſtens. *fig.* 9.	CALYX: a PERIANTHIUM of one leaf, deeply divided into four ſegments, which are flat and permanent. *fig.* 9.
COROLLA nulla, niſi calcyem dicas.	COROLLA none, unleſs the calyx be called ſo.
STAMINA: FILAMENTA quatuor, alba, tranſverſim rugoſa, inſtante antheſi elaſtice reſilientia, calycemque expandentia; ANTHERÆ ovatæ, obtuſæ, didymæ; POLLEN album. *fig.* 4.	STAMINA: four FILAMENTS of a white colour, wrinkled tranſverſely, on the ſhedding of the pollen flying back with an elaſticity, and expanding the calyx; ANTHERÆ ovate, obtuſe, double; POLLEN white. *fig.* 4.
PISTILLUM: GERMEN ovatum, viride, nitidum, nudum; STYLUS filiformis; STIGMA penicilliforme, capitatum, ruberrimum. *fig.* 6.	PISTILLUM: GERMEN ovate, green, ſhining and naked; STYLE filiform; STIGMA forming a bright ſcarlet tuft. *fig.* 6.
PERICARPIUM nullum. *Perianthium* elongatum, majus, campanulatum, coloratum, deciduum; ore laciniis conniventibus clauſo. *fig.* 3.	SEED-VESSEL none. The *Perianthium* becoming elongated, larger, bell-ſhaped, coloured and deciduous; the mouth ſhut by the ſegments cloſing together. *fig.* 3.
SEMEN unicum, ovatum, nitidum, in fundo perianthii.	SEED ſingle, ovate, ſhining in the bottom of the perianthium.
Femineus flos unus inter hermaphroditos ambos, intra involucrum.	One *Female flower* betwixt two hermaphrodite ones, within the involucrum.
CALYX quadrifidus, hirſutus, ereƈtus, germen involvens. *fig.* 5.	CALYX diviſible into four ſegments, hairy, upright, incloſing the germen. *fig.* 5.
COROLLA nulla.	COROLLA none.
PISTILLUM ut hermaphroditi, at ſtigma majus et paulo inflexum. *fig.* 5.	PISTILLUM as in the hermaphrodites, but the ſtigma ſomewhat larger, and bent a little down. *fig.* 5.
PERICARPIUM nullum.	SEED-VESSEL none.
SEMEN unicum ut in hermaphrodito, calyce quadrifido et vix mutato incluſum. *fig.* 7, 8.	SEED ſingle, like that of the hermaphrodites, incloſed in the quadrifid calyx, which is but ſlightly altered. *fig.* 7, 8.

The

The flowers of the *Parietaria* are ſo ſmall, and ſo difficult to inveſtigate, that we need not wonder at their being deſcribed differently by different botaniſts; Linnæus's deſcription, in his *Genera Plantarum*, accords beſt with our obſervations, his therefore we have adopted with ſome few alterations.

We find only two ſorts of flowers on this plant, viz. hermaphrodite and female; of theſe, two hermaphrodite and one female bloſſom are generally placed together in one common involucrum, the female bloſſom intermediate. To obtain a perfect idea of the manner in which the fructification is carried on, we muſt examine theſe flowers at a very early period of their expanſion, we ſhall then find in each involucrum three red ſtigmata, the two outermoſt of which belong to hermaphrodite flowers, whoſe ſtamina are not yet viſible; the middle one, which is largeſt and moſt conſpicuous, to the female. If we take a view of the ſame bloſſoms juſt at the time that the elaſtic filaments by their ſudden expanſion ſcatter the fertilizing duſt of the antheræ, the ſtyles and ſtigmata of the hermaphrodite flowers, viſible before, will often be found wanting, and the germen left naked in the center of the flower; at this period of the bloſſoming, the ſegments of the calyx in the ſame flowers are nearly of the ſame length as the filaments, the ſtyle and ſtigma of the female bloſſom remain perfect, with its germen cloſely ſurrounded by a green, hairy calyx, which never expands: the bloſſoming period being now over, a conſiderable alteration takes place in the calyx of the hermaphrodite flowers, each is conſiderably elongated, becomes more tubular, aſſumes a redder colour, has its tips preſſed down, and ſoon drops out of the involucrum, in which it leaves no appearance of a ſeed; hence I was ready to conclude that theſe flowers, the imperfection of whoſe piſtilla at a certain age had before been noticed, were certainly barren, but on opening them, I found in the bottom of each a ſeed perfectly ſimilar to that produced by, and incloſed in the calyx of the female flower, which does not enlarge as the other does, but partaking more of the nature of a capſule, on preſſure, divides at top into four parts, and contains a blackiſh ſhining ſeed.

It may ſeem a little extraordinary, that the imperfect hermaphrodite flowers of this plant ſhould produce perfect ſeed; but we ſhould conſider that they are perfect at firſt, and that there always is a number of Antheræ belonging to flowers farther advanced burſting near them, from whoſe pollen they may probably be impregnated.

Scopoli deſcribes male flowers on this plant, having a ſeſſile, ſhining, oblong, and pointed Nectary; ſurely he muſt conſider the imperfect germen in the hermaphrodite flowers as a Nectarium, otherwiſe he ſees farther than any of his contemporaries.

The curious manner in which theſe flowers ſhed their Pollen, or fertilizing duſt, is known to moſt botaniſts, but may be new to ſome of our readers; each filament has a peculiarity of ſtructure which renders it highly elaſtic, there are four of them in number, on their firſt appearance they all bend inward; as ſoon as the pollen is arrived at a proper ſtate to be diſcharged, the warmth of the ſun, or the leaſt touch from the point of a pin, will make them inſtantly fly back with a degree of force, and diſcharge a little cloud of duſt. This proceſs is beſt ſeen in a morning, when the ſun ſhines hot on the plant, in July and Auguſt; if the plant be large, numbers will be ſeen exploding at the ſame inſtant.

The *Parietaria*, which takes its name from its place of growth, is frequently found on walls, and among rubbiſh, eſpecially on the walls adjoining the Thames, both above and below Weſtminſter-bridge, it is not a native of *Sweden*, or the more northern countries; this autumn the ſame degree of cold (viz. about 31 of Fahrenheit's thermometer) which ſtripped the mulberry of moſt of its leaves, deſtroyed the greateſt part of its herbage.

Mr. Philip Miller *(vide Dict. ed. 6. 4to.)* aſſerts that the *Parietaria* which grows wild in England is the Pellitory with a Baſil leaf, *Parietaria Ocymi folio* Bauh. *Pin.* *Parietaria judaica* Lin. and that the *officinalis* Lin. which he ſays grows naturally in Germany and Holland, was not in England till the year 1727, when he firſt introduced it; in this opinion Mr. Miller ſtands alone, and there is the greateſt reaſon to ſuppoſe that he is deceived, and the more ſo, as the remainder of his account, in which he ſays that "the ſeeds are difficult to col-
"lect, as they are thrown out of their covers as ſoon as they are ripe with an elaſticity," ſhows extreme inattention.

As a medicinal plant more virtues appear to have been attributed to the *Parietaria* than it deſerves; it has been ranked as an emollient, to which, in the opinion of Floyer and Cullen, it has no pretenſions, as a diuretic it was an ingredient in the nephritic decoction of the late Edinburgh Diſpenſatory, which is omitted in the preſent; in this laſt intention the expreſſed juice has been given in the doſe of three ounces.

Mr. Sole, Apothecary of Bath, well known to the Botanic World, for his extenſive collection of indigenous plants, informs me that he has obſerved remarkably good effects from the juice of this herb in dropſical caſes, in which other diuretics had failed; he converts the juice into a thin ſyrup, and gives two table-ſpoonfuls or more thrice a day.

Monſ. Tournefort, ſpeaking of the *Parietaria*, ſays, "Le ſirop de Parietaire ſoulage fort les hydropiques." *Hiſt. des Pl. de Paris.* Aurelius Victor informs us, that Constantine beſtowed on the Emperor Trajan the name of *Parietaria*, becauſe his ſtatues and his inſcriptions, like that herb, were found on all the walls of Rome. *Le Meme.*

It is recommended to be laid on the corn in granaries, for the purpoſe of driving away that deſtructive inſect the Weevil. *Bradley's Farm. Direct. p.* 122.

BIDENS TRIPARTITA. TRIFID HEMP-AGRIMONY.

BIDENS *Lin. Gen. Pl.* SYNGENESIA POLYGAMIA ÆQUALIS.

Recept. paleaceum. *Pappus* ariſtis erectis ſcabris. *Cal.* imbricatus. *Cor.* rarius floſculo uno alterne radiante inſtruitur.

Raii Syn. Gen. 8. HERBÆ FLORE COMPOSITO DISCOIDE SEMINIBUS PAPPO DESTITUTIS CORYMBIFERÆ DICTÆ.

BIDENS *tripartita* foliis trifidis, calycibus ſubfolioſis ſeminibus erectis. *Lin. Syſt. Vegetab.* p. 610. *Sp. Pl.* 1165. *Fl. Suec.* 283. *Lappon.* p. 234.

BIDENS foliis petiolatis trilobatis et quinque lobatis ſerratis floribus circumvallatis. *Haller Hiſt.* n. 121.

BIDENS *tripartita. Scop. Fl. Carn.* n. 1090.

VERBESINA ſeu Cannabina aquatica flore minus pulchro, elatior et magis frequens. *J. B.* II. 1073.

CANNABINA aquatica folio tripartito diviſo. *Bauh. pin.* 321.

EUPATORIUM cannabinum fœmina, *Ger. emac.* 711.

EUPATORIUM aquaticum duorum generum. *Parkinſ.* p. 595. *Raii Syn.* p. 187. Water Hemp-Agrimony, with a divided Leaf. *Hudſon. Fl. Angl. ed.* 2. p. 355. *Lightfoot Fl. Scot.* p. 461.

RADIX annua, ſimplex, fibroſa, fibris albidis.	ROOT annual, ſimple and fibrous, fibres whitiſh.
CAULIS pedalis ad tripedalem, erectus, ramoſus (ramis oppoſitis), teretiuſculus, modice ſulcatus, rubens, ſolidus, glaber, ſcabriuſculus.	STALK from one to three feet high, upright, branched, (the branches oppoſite), roundiſh, moderately grooved, of a reddiſh colour, ſolid, ſmooth to appearance, but ſlightly rough to the touch.
FOLIA oppoſita, petiolata, connata, glabra, tripartita, aut etiam quinque partita, laciniis profunde ſerratis, ſuprema indiviſa, dentato-ſerrata, aut etiam integra, pilis haud infrequenter ciliata.	LEAVES oppoſite, ſtanding on footſtalks, which unite at the baſe, ſmooth, divided into three, and ſometimes five ſegments, which are deeply ſerrated, the uppermoſt leaves undivided, either indented at the edge, or entire, and not unfrequently edged with hairs.
FLORES lutei, terminales, ſubnutantes.	FLOWERS yellow, terminal, drooping a little.
CALYX: Foliola plura, plerumque integra, lanceolata, ciliata, flores involucri inſtar ambientia; ſquamæ calycis communis ovato lanceolatæ, integræ, lineis plurimis, nigricantibus, parallelis, pictæ, marginibus flaveſcentibus. *fig.* 1.	CALYX: ſeveral, ſmall, lanceolate leaves, generally entire, but edged with hairs ſurrounding the flowers like an involucrum; the ſcales of the calyx common to all the florets are ovate and pointed, entire at the edge, and painted with numerous blackiſh lines, the edges are yellowiſh. *fig.* 1.
COROLLULÆ hermaphroditæ, tubuloſæ, infundibuliformes, luteæ, ſtriis quinque purpureis externe notatæ; limbo quinquefido, ſuberecto. *fig.* 2.	FLORETS hermaphrodite, tubular, funnel-ſhaped, of a yellow colour, marked externally with three purpliſh ſtripes, the limb divided into five ſegments, which are nearly upright. *fig.* 2.
STAMINA: FILAMENTA quinque capillaria; ANTHERÆ in tubum cylindricum coalitæ. *fig.* 3.	STAMINA: five capillary FILAMENTS; ANTHERÆ united into a cylindrical tube. *fig.* 3.
PISTILLUM: GERMEN ſubcompreſſum, angulatum, ſuperne latius, ariſtis tribus plerumque inſtructum, unicâ breviore; *fig.* 3. STYLUS ſimplex, longitudine ſtaminum; STIGMATA duo oblonga, reflexa. *fig.* 4, 5.	PISTILLUM: GERMEN flattiſh, angular, broadeſt at top, generally furniſhed with three awns, of which one is ſhorter than the reſt; *fig.* 3. STYLE ſimple, the length of the ſtamina; STIGMATA two, oblong, turning back. *fig.* 4, 5.
SEMEN oblongum, compreſſum, angulatum, fuſcum, ariſtis duabus ſeu tribus retrorſum ſcabro hamatis inſtructum. *fig.* 6.	SEED oblong, flat, angular, brown, furniſhed with two or three awns, which are hooked or barbed downward. *fig.* 6.
RECEPTACULUM paleaceum, planum, paleis lanceolato-linearibus, lineatis, deciduis. *fig.* 7.	RECEPTACLE chaffy and flat, ſcales or chaff, narrow, marked with lines and deciduous. *fig.* 7.

This ſpecies of *Bidens* is much more common than the *cernua*, as that is generally found in the water, this more frequently occurs on the borders of ponds, rivulets, &c. where it flowers in the months of Auguſt and September, at the cloſe of which it ripens its ſeeds.

It is obviouſly diſtinguiſhed from the *cernua* by having its leaves, for the moſt part, divided into three ſegments, whence its name; this character is more to be depended on than the uprightneſs of its flowers, as they generally droop a little when the plant is in perfection.

LINNÆUS, and other writers, recommend it as a plant that will dye both linen and woollen of a yellow colour, for this purpoſe the yarn or flax muſt be firſt ſteeped in allum-water, then dried and ſteeped in a decoction of the plant, and afterwards boiled in the decoction. *Haller. Hiſt. Helv.* p. 52.

Bidens tripartita.

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Spergula saginoides.

SPERGULA SAGINOIDES. PEARLWORT SPURREY.

SPERGULA *Lin. Gen. Pl.* DECANDRIA PENTAGYNIA.

Cal. 5 phyllus. *Petala* 5, integra. *Capſ.* ovata, 1-locularis, 5-valvis.

Raii Syn. Gen. 24. HERBÆ PENTAPETALÆ VASCULIFERÆ.

SPERGULA *ſaginoides* foliis oppoſitis linearibus lævibus, pedunculis ſolitariis longiſſimis, caule repente. *Lin. Syſt. Vegetab.* p. 363. *Sp. Pl.* 631.

ALSINE tenuifolia pediculis florum longiſſimis. *Vaillant Botan. Paris,* p. 8. a. 11.

SPERGULA *laricina* foliis oppoſitis ſubulatis ciliatis faſciculatis, floribus pentandris. *Hudſon Fl. Angl. ed.* 2. p. 203.

SPERGULA *laricina.* *Lightfoot Fl. Scot.* p. 224.

SAXIFRAGA graminea puſilla foliis brevioribus craſſioribus et ſucculentioribus. *Raii Syn.* p. 345?

RADIX perennis, fibroſa.	ROOT perennial and fibrous.
CAULES ex una radice plures, pollicares aut bipollicares, baſi procumbentes, et ut plurimum repentes, ramoſi, teretes, pilis brevibus glanduliferis vix conſpicuis veſtiti.	STALKS, ſeveral ariſe from one root, an inch or two in length, procumbent, and generally creeping at bottom, branched, round, covered with ſhort glandular hairs, ſcarcely viſible.
FOLIA radicalia ſemipollicaria, linearia, acuta, mucrone albido terminata, ſaturate viridia, glabra, ſubcarnoſa, ſuperne nuda, inferne et ad oras piloſa, pilis glanduliferis; caulina breviora, connata, planiuſcula, ſubſecunda. *fig.* 1.	LEAVES next the root about half an inch in length, linear, ſharp and terminated by a whitiſh point or briſtle, of a deep green colour, ſomewhat ſhining, and rather fleſhy, on the upper ſide ſmooth, on the under ſide, and at the edge, hairy, the hairs terminated by little glands, thoſe of the ſtalk ſhorter, growing together at the baſe, flattiſh, and tending ſomewhat one way. *fig.* 1.
PEDUNCULI ſubereĉti, ſimplices, pollicares et ultra, teretes, ex fuſco purpuraſcentes, apice nutantes.	FLOWER-STALKS ſomewhat upright, ſimple, an inch or more in length, round, of a browniſh purple colour, nodding at top.
FLORES albi, pulchelli.	FLOWERS white and pretty.
CALYX: PERIANTHIUM pentaphyllum, perſiſtens, foliolis ovato-oblongis, concavis, obtuſis, viſcidulis, margine membranaceis. *fig.* 2.	CALYX: a PERIANTHIUM of five leaves, permanent, the leaves oval, hollow, obtuſe, ſomewhat viſcid, the edge membranous. *fig.* 2.
COROLLA: PETALA quinque, alba, longitudine calycis, ſubrotunda, integerrima, patentia. *fig.* 3.	COROLLA: five white PETALS, the length of the calyx, of a roundiſh ſhape, entire at the edge and ſpreading. *fig.* 3.
STAMINA: FILAMENTA quinque ad decem, ſæpius vero quinque, ſubulata, longitudine germinis; ANTHERÆ parvæ, luteæ. *fig.* 4.	STAMINA: FILAMENTS from five to ten, but moſt commonly five, tapering, the length of the germen; ANTHERÆ ſmall and yellow. *fig.* 4.
PISTILLUM: GERMEN obovatum; STYLI plerumque quinque, filiformia, villoſa, reflexa; STIGMATA ſimplicia. *fig.* 5.	PISTILLUM: GERMEN inverſely ovate; STYLES generally five, thread-ſhaped, villous and turned back; STIGMATA ſimple. *fig.* 5.
PERICARPIUM: CAPSULA uni-locularis, quinquevalvis, calyci inſidens.	SEED-VESSEL: a CAPSULE of one cavity, and three valves ſitting on the calyx. *fig.* 6.
SEMINA plurima, minima, fuſca, ad lentem punĉtata. *fig.* 7, 8.	SEEDS numerous, very ſmall and brown, appearing dotted when magnified. *fig.* 7, 8.

We are led to conſider this plant as the *Spergula ſaginoides* of LINNÆUS, from its according exaĉtly with a minute deſcription given of it by VAILLANT in his *Botanicon Pariſienſe* *, to which the former refers, and ſurely no name was ever more aptly applied, for did not its conſpicuous petals proclaim it, it might for ever have paſſed for the *Sagina procumbens*; theſe lead us to the plant, and examination proves it to be a *Spergula*, inconſtant indeed like many other plants in the number of its ſtamina.

In its generic charaĉter this ſpecies of *Spergula* differs in number only from the *Sagina procumbens*, it agrees particularly with it in the form of its capſules, ſize, and ſhape of its ſeeds, but two obvious ſpecific charaĉters at once diſtinguiſh them, theſe are the ſize of the petals, and the peculiar haırineſs of the whole plant; in the *Sagina procumbens* the petals are very ſmall, being much ſhorter than the calyx, whence they are inconſpicuous; in the *Spergula* they are of the ſame length as the calyx, and, when expanded, become very conſpicuous; the *Sagina procumbens* (which muſt not be confounded with the *apetala* LINNÆI) is ſmooth, while the *Spergula* has its ſtalks, leaves, peduncles and calyx covered with ſhort hairs, having little *globules* at their extremities, and which are very diſtinguiſhable when magnified.

It is not uncommon on *Putney Heath*, and in ſimilar ſituations about *Coomb Wood, Surry*; Dr. GOODENOUGH diſcovered it plentifully on *Bagſhot Heath*, eſpecially on ſome banks thrown up on *Potnell Warren*, near the great Bog at *Virginia Water*; Mr. LIGHTFOOT ſhewed it me ſeveral years ago on *Uxbridge Moor*; and Mr. HUDSON mentions it as growing about *Cobham* and *Eſher* in *Surry*. It flowers from June to Auguſt.

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* Cette plante a le port & les feuilles de l' *Alſine minima flore fugaci.* *J. R. H.* mais elle s'eleve plus haut. Les tiges et les pedicules des fleurs ſont ordinairement brunes. Sa fleur n'a qu' environ 2 lignes de diamêtre. Elle eſt a 5 petales blancs, entiers ronds, qui ne debordent point le calice & qui ſont oppoſé a ſes cantons. Le piſtile eſt un petit bouton tirant ſur l'ovale, vert pâle, ſurmonté de 5 ſtiles blancs, courts diſpoſez en etoile, & entouré de 10 Etamines blanches ainſy que leurs ſommets. Ces Etamines n'ont pas une ligne de long. Le calice eſt parſemé de petits poils tres courts. Il eſt decoupé en etoil a 5 parties egales. Cette plante ne s'eleve que depuis 2 juſqu'a 4 pouces, elle pouſſe ordinairement pluſieurs tiges de ſa racine, leſquelles ſe couchent d'abord ſur la terre, & ſont droites dans le reſt de leur longuer. Ses feuilles ſont liſſes, vertes, roides, dures et reſemblent aſſez bien a celles du Knawel ou de l' *Alſine minima flore fugaci.* Elle commence a fleurir vers la fin de May & continue en Juin & Juillet. Elle ſe trouve dans les friches qui ſont au de la St. Leger entre la foreſt et le Village de St. Lucien le long du chemin. Elle n'a que le gouſt d'herbe. Son fruit s'ouvre ordinairement en 4 & quelquefois 5 lobes de la pointe vers la baſe & contient dans ſa cavité pluſieurs ſemences noiraſtre tres menues. *Botan. Par. p.* 8, 9.

AGARICUS VELUTIPES. VELVET-STALK'D MUSHROOM.

AGARICUS *Lin. Gen. Pl.* CRYPTOGAMIA FUNGI.

Fungus horizontalis, ſubtus lamelloſus.

Raii Syn. Gen. 1. FUNGI.

AGARICUS *velutipes* faſciculoſus, pileo planiuſculo fulvo, ſtipite nudo, tenerrime villoſo, fuliginoſo.

FUNGUS glutinoſus colore aurantio. *Vaillant Bot. Paris.* p. 72. 8. t. 12. *fig.* 8, 9.

FUNGUS faſciculoſus, pileo orbiculari luteſcente, pediculo fuſco, tenerrime villoſo, lamellis ex flavo candicantibus. *Raii Syn. ed.* 3. p. 9.

Ex ligno putreſcente, ſeu arboribus cæſis, coacervatim plerumque naſcitur hic fungus.

VOLVA ad radicem nulla.

STIPES in plantâ mediæ magnitudinis longitudine indicem, craſſitie pennam anſerinam æquat, teres, haud infrequenter compreſſus, fiſtuloſus, tenerrime villoſus, ſeu velutinus, inferne præſertim in vetuſtis e rufo-nigricans, fuligine quaſi infectus, carneâ citrinâ, in tenuiſſima fila ſericea partibili.

ANNULUS nullus.

PILEUS uncialis ad triuncialem, modice convexus, ſæpe difformis, fulvus, glutinoſus; LAMELLÆ plurimæ, inequales, ex albido-luteſcentes, in majoribus et ſeneſcentibus fungis craſſæ, coriaceæ, luteæ, ad marginem pilei undulatæ, longioribus baſi auriculatis, omnibus venoſis; POLLEN cinereum.

This Fungus uſually grows in cluſters, out of decayed wood or felled trees.

SHEATH or egg at the root wanting.

STALK in plants of a middle ſize about the length of the forefinger, and thickneſs of a gooſe-quill, round, not unfrequently flat, hollow, velvety, on the lower part, eſpecially in the old ones, of a reddiſh black colour, as if tinged with ſoot, the fleſh citron coloured, and ſeparable into ſilk-like threads.

RING, or ruffle, wanting.

CAP from one to three inches in diameter, moderately convex, often ſhapeleſs, of an orange or tawny colour, ſlimy; GILLS numerous, unequal, of a whitiſh yellow colour, in the larger and older fungi thick, leathery, yellow, waved towards the edge of the cap, the longer ones ear'd at the baſe, and all of them veiny; POLLEN, or ſeed, aſh-coloured.

Many of the fungi, like the more perfect plants, make their appearance only at a certain period of the year; others are continually ſpringing up and producing their fructifications, almoſt regardleſs of particular ſeaſons, of the latter kind is the fungus here figured, at leaſt it may be found from September to January in the greateſt plenty.

It uſually grows out of dead, or decaying wood, eſpecially willow and elm, and almoſt always in cluſters of different ſizes, according to particular ſituations; at the bottoms of old willow-trees I have often ſeen fifty or more in a cluſter, with the caps of ſome of the largeſt almoſt as broad as the palm of one's hand, while on ſmall rotten ſticks the cluſter has conſiſted of not more than three or four, with caps not more than half an inch in diameter, but however it may vary in regard to ſize, &c. it luckily has a character which always readily diſtinguiſhes it, and this is its velvety and ſooty ſtalk, moſt conſpicuous in thoſe which are advanced.

RAY's ſynonym and deſcription correſpond pretty accurately with our fungus; Mr. HUDSON appears to have overlooked or confounded it with ſome other ſpecies; VAILLANT has given a good figure, and accurate deſcription of it, in his moſt elegant work the *Botanicon Pariſienſe*.

To the taſte this muſhroom is rather agreeable, and devoid of all acrimony, perhaps it may be eaten with ſafety, it is not however of the kind recommended by HORACE,

> *——— ——— pratenſibus optima fungis*
> *Natura eſt: aliis malè creditur.*

Agaricus Velutipes.

Polygonum amphibium.

POLYGONUM AMPHIBIUM. AMPHIBIOUS PERSICARIA.

POLYGONUM *Lin. Gen. Pl.* OCTANDRIA TRIGYNIA.
Cal. 0. *Cor.* 5-partita, calycina. *Sem.* 1. angulatum.
Raii Syn. Gen. 5. HERBÆ FLORE IMPERFECTO SEU STAMINEO VEL APETALO POTIUS.
POLYGONUM *amphibium* floribus pentandris ſemidigynis, ſpica ovata. *Lin. Syſt. Vegetab.* p. 312. *Sp. Pl.* 517. *Fl. Suec.* n. 341.
POLYGONUM foliis ovato lanceolatis ciliatis, ſpicis ovatis. *Haller Hiſt.* n. 1565.
POTAMOGETON ſalicis folio. *Bauh. pin.* 193.
FONTALIS major longifolia. *Parkinſ.* 1254.
POTAMOGITON anguſtifolium. *Ger. emac.* 821.
PERSICARIA ſalicis folio perennis. *Raii Syn.* Perennial Willow-leaved Arſmart, commonly called narrow-leaved Pondweed. *Hudſon Fl. Angl. ed.* 2. p. 169. *Lightfoot Fl. Scot.* p. 207. *Oeder Fl. Dan.* t. 282. *Threlkeld Syn. Stirp. Hibern.*

RADIX perennis, repens, craſſitie culmi triticei majoris, e rubro-fuſca, ex hortis ſive agris difficillime eruta.	ROOT perennial, creeping, the thickneſs of a large wheaten ſtraw, of a reddiſh brown colour, with the greateſt difficulty rooted out of gardens or fields.
CAULIS ſeſquipedalis et ultra, adſcendens, plerumque ſimplex, teres, fiſtuloſus, ſæpius ruber, geniculis tumidiuſculis.	STALK a foot and a half or more in length, bending upward, generally ſimple, round, hollow, moſt commonly of a red colour, the joints a little ſwelled.
FOLIA petiolata, cordato-lanceolata, hirſutula, ciliata, rigidula, ſaturate viridia, ſæpe maculata, ſubundulata, alterna, patentia.	LEAVES ſtanding on footſtalks, lanceolate, with a heart-ſhaped baſe, ſlightly hirſute, edged with hairs, harſh to the touch, of a deep green colour, often ſpotted, ſomewhat waved, alternate, and ſpreading.
STIPULÆ longæ, muticæ, hirſutæ, vaginantes, caulem arcte cingentes.	STIPULÆ long, not fringed with hairs at the extremity, hirſute, forming a ſheath, which cloſely ſurrounds the ſtalk.
PEDUNCULI ſolitarii, ſeu gemini, hirſuti, rubri, ad unum latus compreſſo-ſulcati, vix terminales.	FLOWER-STALKS growing ſingly, or two together, hirſute, red, on one ſide flattened, and ſlightly grooved, not properly terminal.
SPICÆ ruberrimæ, primo pyramidales, demum ovatæ.	SPIKES of the flowers of a bright red colour, at firſt pyramidal, afterwards ovate.
CALYX: PERIANTHIUM pedicellatum, quinque-partitum, coloratum, perſiſtens, laciniis ovatis, obtuſis. *fig.* 1.	CALYX: a PERIANTHIUM on a footſtalk, divided into five ſegments, coloured and permanent, the ſegments ovate and obtuſe. *fig.* 1.
COROLLA nulla.	COROLLA wanting.
STAMINA: FILAMENTA quinque, aut ſex, fundo calycis inſerta, ſubulata, alba, calyce longiora; ANTHERÆ didymæ; POLLEN album, globoſum. *fig.* 2.	STAMINA: five FILAMENTS inſerted into the bottom of the calyx, tapering, white, longer than the calyx; ANTHERÆ double; POLLEN white and globular. *fig.* 2.
PISTILLUM: GERMEN ſubovatum, rubrum; STYLUS ad medium uſque diviſus; STIGMATA duo, rotunda. *fig.* 3.	PISTILLUM: GERMEN ſomewhat ovate, and of a red colour; STYLE divided as far as the middle; STIGMATA two, round. *fig.* 3.
SEMEN ovatum, utrinque compreſſum, acutum, nitidum, e nigro caſtaneum. *fig.* 4.	SEED ovate, flattened on each ſide, pointed, gloſſy, of a dark cheſnut colour. *fig.* 4.

The ſpecies of *Polygonum* here figured acquires the name of *amphibium* from its growing both on land and in water; in ponds its leaves uſually float, whence the antient botaniſts, regardleſs of its fructification, improperly called it a *Pondweed*, thus CASPAR BAUHINE gives it the name of *Potamogeton ſalicis folio*; RAY very properly corrects this error, and calls it *Perſicaria Salicis folio perennis*.

Of the *Perſicaria* diviſion of the genus *Polygonum Linnæi*, this is the only one that has a perennial root, a character which at once diſtinguiſhes it as a ſpecies, beſides this it has many peculiarities, the leaves are heart-ſhaped at the baſe, with the edges fringed with hairs, they are alſo harſher to the touch than any of the other Perſicaria's, eſpecially when the plant grows out of the water, its ſtipulæ more cloſely ſurround the ſtalk, which has generally two ſpikes of flowers at its extremity, neither of which are perfectly terminal, theſe ſpikes are more pyramidal when young, and of a brighter red colour than any of the ſpecies related to it; when it grows in the water the whole plant becomes ſmoother and is more diſpoſed to bloſſom; botaniſts have alſo obſerved that the ſtamina, which when the plant grows on land are longer, are here ſhorter than the corolla*.

As a weed few plants are more pernicious, Batterſea Fields, in which this plant abounds, bear ſufficient teſtimany to the truth of this aſſertion, as its roots not only creep, but penetrate ſo deep into the earth that they are ſeldom or never eradicated; in the drier part of the fields it ſeldom flowers, but in certain ſpots, where the water has ſettled in wet ſeaſons, it flowers abundantly in September.

From its bloſſoming thus rarely in arable land it fortunately is a more local plant than many of the ſame genus, the ſeeds of which are either ſown or introduced with manure.

To atone for its miſchievous effects on land, it contributes highly to ornament ponds, rivers, and pieces of water; thoſe who wiſh to cultivate it for this purpoſe need only plant the roots near the water's edge, the plants will quickly find their way into the water, where they muſt be ſecured from water-fowl, who are fond of its ſeeds.

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* This is by no means conſtant.

Menyanthes trifoliata.

MENYANTHES TRIFOLIATA. BUCKBEAN.

MENYANTHES *Lin. Gen. Pl.* PENTANDRIA MONOGYNIA.

Corolla hirſuta. *Stigma* 2-fidum. *Capſ.* 1-locularis.

Raii Syn. Gen. 18. HERBÆ FRUCTU SICCO SINGULARI, FLORE MONOPETALO.

MENYANTHES *trifoliata* foliis ternatis. *Lin. Syſt. Vegetab.* p. 164. *Sp. Pl.* 208. *Fl. Suec.* n. 173. *Fl. Lappon.* p. 50.

MENYANTHES foliis ternatis. *Haller Hiſt.* n. 633.

MENYANTHES *trifoliata.* *Scopoli Fl. Carn.* n. 212.

TRIFOLIUM paluſtre. *Bauh. Pin.* 327.

TRIFOLIUM paludoſum. *Ger. emac.* 1194. *Parkinſ.* 1212.

TRIFOLIUM fibrinum *Tabern. et Germanorum.* *Raii Syn.* p. 285. Marſh-Trefoil, Buckbeans. *Hudſon Fl. Angl. ed.* 2. p. 85. *Lightfoot Fl. Scot.* p. 137. *Oeder Fl. Dan.* 541.

RADIX perennis, repens, longa, geniculata, fibroſa.	ROOT perennial, creeping, long, jointed and fibrous.
CAULIS procumbens, variæ longitudinis pro ratione loci, vaginis tectus.	STALK procumbent, various in its length, according to its ſituation, covered by the ſheaths of the leaves.
FOLIA petiolata, ternata, ovata, obtuſa, utrinque glabra, venoſa, margine repanda.	LEAVES ſtanding on foot-ſtalks, growing three together, ovate, obtuſe, ſmooth on both ſides, veiny, the edge waved or ſerpentine.
PETIOLI teretes, ſtriati, baſi vaginati.	LEAF-STALKS round, ſtriated, forming a ſheath at the bottom.
SCAPUS ſimplex, nudus, e vaginis foliorum natus, erectus, teres, glaber, foliis longior.	SCAPUS, or flowering ſtem, ſimple, naked, ariſing from the ſheaths of the leaves, upright, round, ſmooth, longer than the leaves.
THYRSUS terminalis, ſubpyramidalis, nudus.	THYRSUS terminal, ſomewhat pyramidal, naked.
BRACTEÆ ovatæ, acutiuſculæ, concavæ.	FLORAL-LEAVES ovate, ſomewhat pointed and hollow.
CALYX: PERIANTHIUM monophyllum, quinque partitum, baſi rugoſum, laciniis erectis, oblongis, obtuſis, lævibus, margine coloratis. *fig.* 1.	CALYX: a PERIANTHIUM of one leaf, deeply divided into five ſegments, at bottom wrinkly, the ſegments upright, oblong, obtuſe, ſmooth, and coloured on the edge. *fig.* 1.
COROLLA monopetala, campanulato-infundibuliformis, extus roſea, intus alba; *Tubus* craſſus, calyce longior, quinque-ſulcatus; *Limbus* quinque-partitus, laciniis ovato-lanceolatis, acutiuſculis, reflexo-patentibus, intus barbatis, apicibus nudis, barbâ longitudine calycis, filamentoſa, alba. *fig.* 2.	COROLLA monopetalous, betwixt bell and funnel-ſhaped, externally of a roſe colour, internally white; *Tube* thick, longer than the calyx, having five grooves; *Limb* divided into five ſegments, which are narrow and pointed, ſpreading and turned back, bearded on the inſide, the tips naked, beard the length of the calyx, thready and white. *fig.* 2.
STAMINA: FILAMENTA quinque, ſubulata, alba, corollæ tubo adnata; ANTHERÆ purpuraſcentes, ſagittatæ, apicibus incurvis; POLLEN flavum. *fig.* 3.	STAMINA: five FILAMENTS, tapering, white, growing to the tube of the corolla; ANTHERÆ purpliſh, arrow-ſhaped, the tips bending in; POLLEN yellow. *fig.* 3.
PISTILLUM: GERMEN ovatum, viride, nitidum; STYLUS cylindricus, ſuperne paululum incraſſatus, ſtaminibus duplo longior; STIGMA bilabiatum, flavum, villoſum. *fig.* 4.	PISTILLUM: GERMEN ovate, green, ſhining; STYLE cylindrical, above a little thickened, twice the length of the ſtamina; STIGMA compoſed of two lips, green and villous. *fig.* 4.

PARKINSON informs us, that in his time this plant was generally called by the name of *Marſh-trefoil,* and ſometimes *Marſh-claver*; it is now generally known by the name of *Buckbean,* whether this be a corruption of the compound word *Bog-bean,* or of the low Dutch *Boex boonen,* hoc eſt *Phaſeolum hircinum,* or whether it be an original Engliſh word we ſhall not preſume to determine, it being a point on which the learned themſelves are not agreed; but there is one point in which all who have ſeen the Buckbean in perfection will at once agree, viz. that it is one of the moſt beautiful plants this country can boaſt, nor does it ſuffer when compared with the *Kalmia's,* the *Rhododendron's,* and the *Erica's* of foreign climes, which are purchaſed at an extravagant price, and kept up with much pains and expence, while this delicate native, which might be procured without any expence, and cultivated without any trouble, bloſſoms unſeen, and waſtes its beauty in the deſart air.

It grows abundantly in moſt boggy meadows, it will alſo flouriſh in ponds and lakes, and may be found in *Batterſea Meadows,* particularly about a hundred yards diſtant from the *Red Houſe* towards *Chelſea,* alſo plentifully in the marſhes about the iſland of *St. Helena,* near *Rotherhithe,* and no where in greater plenty than in the marſhes about *Staines,* in many of which it is the principal plant. It flowers in May and June.

To ſuch as wiſh to have this plant flower with them in perfection, I would recommend the following mode of cultivation: collect the roots of the plant either in ſpring or autumn, put them in a large pot (having a hole at the bottom) filled with bog earth, immerſe the pot about two-thirds of its depth in water, in which it ſhould continue; the advantage of this method is, that when the plant is coming into flower it may be brought into any room and placed in a pan of water, where it will continue to bloſſom for two or three weeks. A ſingle root which I treated in this manner, planted in the ſpring, produced the enſuing May eight flowering ſtems, many of which had fifteen or ſixteen bloſſoms on them.

Linnæus, in his invaluable *Flora Lapponica*, has ſeveral curious obſervations on the Buckbean, he informs us that the inhabitants of *ſome parts of Lapland*, and alſo of *Weſtrobothnia*, draw out the roots, which grow plentifully in the rivulets, and for want of other fodder give them to their cattle, who conſume them entirely; alſo that, in times of ſevere ſcarcity, the miſerable inhabitants mix the powder of the dried roots with a ſmall quantity of meal and convert them into bread, which, he obſerves, is very bitter and extremely nauſeous; that it was a general practice with the peaſants of *Weſtrogothia*, in brewing, to ſubſtitute the bitter leaves of this plant for the hop, and that they were equally efficacious in preventing the beer from becoming ſour;—he concludes his remarks by obſerving, that Bartholin, Simon Pauli, and others, have exclaimed much on the ſcurvy of the northern regions, ariſing from cold, and of the profuſion of antiſcorbutic plants to be met with in thoſe countries, among which they enumerate the Buckbean as a principal one; Linnæus however aſſerts, that out of the great number of Laplanders he had ſeen not one was affected with that diſeaſe, although they lived in the coldeſt habitable climate, and uſed no vegetable for their ordinary food, not even bread. On the contrary, he had obſerved the ſcurvy to be one of the moſt common diſeaſes of thoſe who inhabited the countries adjacent.

Many phyſicians have a high opinion of its medical virtues.

“ It is of ſubtle penetrating parts, a good *diuretic* and *antiſcorbutic*, whence it is alſo of great uſe to people “ afflicted with *rheumatic pains*. An *infuſion* of the dried leaves may either be drank like tea, or they may be in- “ fuſed in white wine. It is a very intenſe *bitter*, and at firſt not very agreeable. *Dr. Deering Cat. Stirp.*

“ Marſh-trefoil is an efficacious aperient and deobſtruent, promotes the fluid ſecretions, and, if liberally taken, “ gently looſens the belly. It has of late gained great reputation in ſcorbutic and ſcrophulous diſorders; and its “ good effects in theſe caſes have been warranted by experience; inveterate cutaneous diſeaſes have been removed “ by an infuſion of the leaves drank to the quantity of a pint a day, at proper intervals, and continued ſome “ weeks.” *Lewis's Diſp.* p. 242.

It is alſo extolled for its efficacy in removing a variety of other diſeaſes, as the periodical head-ach, aſthma, protracted intermittents, jaundice, dropſy, wandering gout, worms, &c.—but we forbear ſaying more of it on this head, leaſt its real virtues ſhould be called in queſtion.

Dr. Tancred Robinson aſſerts, that ſheep are cured of the rot by being driven to feed in marſhes where this plant abounds; this, if true, would prove a moſt valuable diſcovery.

Arctium Lappa

ARCTIUM LAPPA. BURDOCK.

ARCTIUM *Lin. Gen. Pl.* SYNGENESIA POLYGAMIA ÆQUALIS.

Cal, globoſus; ſquamis apice hamis inflexis.

Raii Syn. Gen. 9. HERBÆ FLORE EX FLORIBUS FISTULARIBUS COMPOSITO SIVE CAPITATÆ.

ARCTIUM *Lappa* foliis cordatis inermibus petiolatis. *Lin. Syſt. Vegetab.* p. 603. *Sp. Pl.* 1143. *Fl. Suec.* n. 712.

LAPPA *Haller Hiſt.* n. 161.

LAPPA major ſeu Arctium Dioſcoridis. *Bauh. Pin.* 198.

PERSONATA ſive Lappa major aut Bardana. *J. B.* III. 570.

BARDANA major. *Ger. emac.* 809.

BARDANA vulgaris major. *Park.* 1222. *Raii Syn.* 197. Great Burdock, Clot-burr. *Hudſon. Fl. Angl. ed.* 2. p. 348. *Lightfoot Fl. Scot.* p. 197. *Oeder Fl. Dan.* t. 642.

RADIX biennis, ſimplex, profunde in terram deſcendens, foris nigricans, intus alba.	ROOT biennial, ſimple, penetrating deeply into the earth, externally blackiſh, internally white.
CAULIS erectus, tripedalis et ultra, craſſitudine pollicis, ad baſin uſque ramoſiſſimus, teres, ſtriato-ſulcatus, villoſus, purpuraſcens.	STALK upright, three feet high and more, the thickneſs of one's thumb, branched quite down to the bottom, round, grooved, but not deeply, hoary and purpliſh.
FOLIA ampliſſima, petiolata, alterna, cordata, ſubtus albida, venoſa, margine ſubundulatâ, crenulatâ.	LEAVES very large, ſtanding on footſtalks, alternate, heart-ſhaped, whitiſh underneath, veiny, the edge ſomewhat waved and notched.
PETIOLI foliis breviores, ſulcato-angulati, villoſi.	LEAF-STALKS ſhorter than the leaves, angular or grooved, and hoary.
FLORES purpurei, pedunculati, erecti, ramulis alterne diſpoſiti, ſuperne in capitula laxa collecti.	FLOWERS purple, ſtanding on footſtalks, upright, diſpoſed alternately on the branches, and at the tops of them collected into looſe heads.
CALYX communis globoſus, imbricatus, glaber, filis araneoſis intertextus, ſquamis exterioribus apice hamatis, hamis nitidis, acutiſſimis, ſubinflexis, *fig.* 1, 2. interioribus linearibus, apice vivide purpureis, ſimplicibus, ſine hamis.	CALYX common to all the florets globular, imbricated, ſurface ſhining, cobwebby, the exterior ſcales hooked at the extremity, hooks ſhining, very ſharp, and ſomewhat bent in, *fig.* 1, 2. inner ſcales linear, tops of a bright purple colour, ſimple, without hooks.
COROLLA compoſita, calyce longior, tubulata, *propria* infundibuliformis, tubo filiformi, albo, limbo tubuloſo-campanulato, purpureo, quinque-fido, acuto, erecto.	COROLLA compound, longer than the calyx, tubular, *Florets* funnel-ſhaped, tube filiform, white, limb tubular, and ſomewhat bell-ſhaped, of a purple colour, divided into five upright, pointed ſegments.
STAMINA: FILAMENTA quinque alba, capillaria; ANTHERÆ cæruleſcentes, aut violaceæ, in tubum extra corollam coalitæ.	STAMINA: five white capillary FILAMENTS; ANTHERÆ blueiſh, or violet coloured, united into a tube, which projects beyond the corolla.
PISTILLUM: GERMEN ſubtriquetrum, album, incurvatum; STYLUS albus, ſtaminibus longior, utrinque ſulcatum; STIGMA bifidum.	PISTILLUM: GERMEN ſomewhat three-cornered, white, bending inward; STYLE white, longer than the ſtamina, grooved on each ſide; STIGMA bifid.
SEMINA oblonga, baſi attenuata, punctis prominentibus coronata, compreſſa, ſubangulata, reticulato-rugoſa, exterioribus incurvatis. *Pappus* obſoletus, rigidulus. *fig.* 3.	SEEDS oblong, tapering towards the baſe, crowned with ſmall prominent points, flattened, ſomewhat angular, ſurface wrinkly, in the form of net-work, outermoſt ſeeds bending inward. *Down* obſolete, ſomewhat rigid. *fig.* 3.

The antient botaniſts divided the Burdock, which they diſtinguiſhed by the ſeveral names of *Lappa* [*] *Perſonata*, and *Arctium* or *Arcium* into two principal ſpecies, viz. the *Lappa major Arcium Dioſc. C. B.*; and the *Lappa major montana capitulis tomentoſis ſive Arctium Dioſc. C. B.*; both of which are admirably figured by MATTHIOLUS on wood, as indeed are moſt of the medicinal plants; later botaniſts have made the ſpecies much more numerous; in the third edition of RAY's *Synopſis* we find no leſs than ſix ſpecies and one variety, viz.

1. *Lappa major capitulo glabro maximo.*
2. *Lappa major Arcium Dioſcoridis.*
3. *Lappa major capitulis parvis glabris.*
4. *Lappa major montana capitulis tomentoſis; ſive Arctium Dioſcoridis.*

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[*] *Lappa* dici poteſt vel ἀπὸ τοῦ λαβεῖν prehendere vel ἀπὸ τοῦ λάπτειν, i. e. lambere, quod prætereuntium veſtibus adhæreat. *Perſonata* autem dicitur, quod folia ejus prægrandia veluti larvæ aut perſonæ vice obtendi ſolita eſſent. Veteribus *Arction* aut *Arcion* dicta creditur, verum ratio nominis ignoratur. *Raii Hiſt.* p. 332.

5. *Lappa*

5. *Lappa major montana, capitulis minoribus, rotundioribus & magis tomentoſis.*
6. *Lappa major ex omni parte minor, capitulis parvis eleganter reticulatis.*
Lappa vulgaris major capitulis folioſis. Var.

All theſe are however conſidered by the botaniſts of the preſent day as one ſpecies, to which may be added a variety with white flowers, which often occurs.

The Burdock is a very common plant by way ſides, and in waſte places, and flowers in July and Auguſt.

In the ſize of its leaves it may ſometimes diſpute the palm with the Butterburr; painters often introduce them in the foregrounds of their pictures, which they are admirably well calculated to embelliſh.

No ſort of cattle reliſh the foliage of this plant, but ſnails, ſlugs, and many ſpecies of caterpillars feed on it deliciouſly; the pith produces its particular moth, which does not appear to be deſcribed by LINNÆUS, but is moſt accurately figured by SEPP[*], and called by Aurelians the *Mottled Orange*, the caterpillar of this moth changes into chryſalis about the beginning of Auguſt, during which month it may be found in that ſtate by ſplitting the ſtalks of ſuch plants as appear ſtinted in their growth; the moth comes out about the end of Auguſt, and is one of thoſe whoſe bodies are extremely apt to become greaſy, to prevent which the body ſhould be carefully opened on the under ſide, and its contents taken out previous to its being placed in the cabinet. A ſmall larva, not peculiar to this plant, feeds alſo betwixt the coats of the leaf.

The ſeeds, like thoſe of the thiſtle tribe, are ſought for by ſeveral of the feathered ſongſters, and are even recommended to fatten poultry[†].

The microſcope informs us, *vide fig.* 1, 2. why the burrs adhere ſo cloſely to one's cloaths, and why boys, who divert themſelves by throwing them at one another, have ſo much difficulty in extricating them from their hair.

As a weed it is not ſo formidable as it appears to be, being a biennial the huſbandman has only to deſtroy its ſeedlings.

The root and ſtalks are eſculent and nutritive; the ſtalks for this purpoſe ſhould be cut before the plant flowers, the rind peeled off, and then boiled and ſerved up in the manner of Chardoons, or eaten raw, as a ſallad, with oil and vinegar. *Lightfoot Fl. Scot.* p. 446.

The ſeeds have a bitteriſh, ſubacrid taſte, they are recommended as very efficacious diuretics, given either in the form of emulſion or in powder to the quantity of a drachm. The roots taſte ſweetiſh, with a ſlight auſterity and bitteriſhneſs; they are eſteemed aperient, diureric and ſudorific, and ſaid to act without irritation, ſo as to be ſafely ventured on in acute diſorders. Decoctions of them have of late been uſed in rheumatic, gouty, and other diſorders, and preferred by ſome to thoſe of Sarſaparilla. LEWIS's *Diſp.* p. 101.

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[*] *Nederlandſche Inſecten.* t. 3.

[†] *Stirp. indig. Aragon.* p. 113.

EUPHORBIA EXIGUA. SMALL SPURGE.

EUPHORBIA *Lin. Gen. Pl.* DODECANDRIA TRIGYNIA.

Cor. 4 ſ. 5-petala, calyci inſidens. *Cal.* 1-phyllus, ventricoſus. *Capſ.* 3-cocca.

Raii Syn. Gen. 22. HERBÆ VASCULIFERÆ, FLORE TETRAPETALO ANOMALÆ.

EUPHORBIA *exigua* umbella trifida: dichotoma: involucellis lanceolatis, foliis linearibus. *Lin. Syſt. Vegetab.* p. 375. *Sp. Pl.* p. 654.

TITHYMALUS foliis linearibus, ſtipulis lanceolatis ariſtatis. *Haller Hiſt.* n. 1048.

TITHYMALUS ſive Eſula exigua. *Bauh. Pin.* p. 295.

ESULA exigua Tragi. *Ger. emac.* 502.

TITHYMALUS leptophyllus. *Parkinſ.* 193. *Raii Syn.* 313. Dwarf Spurge, or ſmall annual Spurge. *Hudſon Fl. Angl. ed.* 2. p. 208. *Lightfoot Fl. Scot.* p. 250.

RADIX annua, ſimplex, paucis fibrillis inſtructa.	ROOT annual, ſimple, furniſhed with few fibres.
CAULIS erectus, ramoſus, folioſiſſimus, ſemipedalis.	STALK upright, branched, very leafy, about ſix inches high.
RAMI plerumque inferiorem partem caulis tantummodo occupant, oppoſiti, ſuberecti.	BRANCHES generally occupy the lower part of the ſtalk only, are oppoſite and nearly upright.
FOLIA plurima, appreſſa, linearia, obtuſiuſcula.	LEAVES numerous, preſſed to the ſtalk, linear, and ſomewhat obtuſe.
UMBELLA trifida, interdum quadrifida, rarius quinquefida, dichotoma.	UMBELL dividing into three branches, ſometimes four, rarely five, thoſe forked.
STIPULÆ *Umbellæ* lanceolato-lineares.	STIPULÆ of the *general Umbell* of a ſhape betwixt lanceolate and linear.
——— *Umbellulæ* ovato-oblongæ, acuminatæ, oppoſitæ, ſæpe inæquales.	——— of the *partial Umbell*, of an oblong, ovate ſhape, running out to a point, oppoſite, and often irregular.
CALYX glabra, perſiſtens. *fig.* 1. *auct.*	CALYX ſmooth, and permanent. *fig.* 1. *magnified.*
COROLLA nulla.	COROLLA wanting.
NECTARIA quatuor, *corniculata*, fuſca. *fig.* 2, 3.	NECTARIES four, of a browniſh colour, each furniſhed with two little horns. *fig.* 2, 3.
STAMINA plerumque duo viſibilia; ANTHERÆ didymæ. *fig.* 4.	STAMINA generally about two viſible; ANTHERÆ double. *fig.* 4.
PISTILLUM: GERMEN ſubrotundum, petiolatum, nutans; STYLI tres; STIGMA bifidum. *fig.* 5, 6.	PISTILLUM: GERMEN roundiſh, ſtanding on a footſtalk, and drooping; STYLES three; STIGMA bifid. *fig.* 5, 6.
PERICARPIUM: CAPSULA tricocca, trilocularis.	SEED-VESSEL, a Capſule with three prominent ſides, and three cavities.
SEMEN unicum in ſingulo loculamento, nigrum, rugoſum.	SEED: a ſingle one in each cavity, black, and wrinkled.

This ſmall and delicate ſpecies of Spurge is often found in Corn-fields about *London*, eſpecially on the *Surry* ſide of the *Thames*, nor is it uncommon in many other parts of *England*.

It flowers in *July* and *Auguſt*.

The *Tithymalus ſegetum longifolius* of RAY, conſidered by Profeſſor MARTYN in his *Plant. Cantab.* as the *ſegetalis* of LINNÆUS, has by ſome been thought to be no other than a large ſpecimen of this plant; Mr. HUDSON makes it a variety of the *platyphyllos*; ſuppoſing ſuch a plant as the *ſegetalis* to exiſt, it cannot be a variety of the *exigua* becauſe it has rough Capſules, and its leaves are by far too narrow for the *platyphyllos*, vid. JACQUIN *Fl. Auſtr. V.* 3. & 4. who figures them both, and conſiders them as diſtinct ſpecies.

Euphorbia exigua.

Jasione montana

JASIONE MONTANA. HAIRY SHEEP'S-SCABIOUS.

JASIONE *Lin. Gen. Pl.* Syngenesia Monogamia.

Cal. communis 10-phyllus. *Cor.* 5-petala, regularis. *Capſ.* infera, bilocularis.

JASIONE *montana.* *Lin. Syſt. Vegetab.* p. 666. *Spec. Pl.* p. 1317. *Fl. Suec.* n. 782.

RAPUNCULUS foliis linearibus ſubaſperis, ſpica planiuſcula, petalis liberis. *Haller Hiſt.* n. 678.

RAPUNCULUS ſcabioſæ capitulo cæruleo. *Bauhin Pin.* 92.

RAPUNTIUM montanum capitatum leptophyllon. *Col. Ecphr.* 1. p. 226. t. 227.

SCABIOSA globularis quam ovinam vocant *J. B.* III. 12.

SCABIOSA minima hirſuta. *Ger. emac.* 723. *Raii Syn.* p. 278. Hairy Sheep's Scabious, or rather Rampions with Scabious Heads. *Hudſon Fl. Angl. ed.* 2. p. 377. *Lightfoot Fl. Scot.* p. 377.

RADIX annua, lignoſa, albida, fibroſa.	ROOT annual, rigid, whitiſh and fibrous.
CAULES plures, ſuberecti, ſpithamæi, etiam pedales et ultra, rigiduli, ramoſi, hirſuti.	STALKS ſeveral, nearly upright, about a ſpan in length, but ſometimes a foot or more, rather rigid, branched, and beſet with ſhort rough hairs.
FOLIA plurima, ſeſſilia, lineari-lanceolata, obtuſiuſcula, undulata, hirſuta.	LEAVES numerous, ſeſſile, between linear and lanceolate, bluntiſh, waved and hirſute.
FLORES capitati, cærulei, ſummitatibus ramorum inſidentes.	FLOWERS of a blue colour, growing in little heads on the tops of the branches.
CALYX: *Perianthium commune* polyphyllum: foliolis alternis, interioribus anguſtioribus, includens flores plurimos pedunculis breviſſimis adnexos, perſiſtens. *fig.* 1.	CALYX: the *Perianthium common to all the florets* compoſed of many leaves, which are alternate, thoſe of the inner-row narroweſt, including numerous flowers ſitting on very ſhort footſtalks, and permanent. *fig.* 1.
Perianthium proprium quinquefidum, ſuperum, perſiſtens.	*The Perianthium of each floret* deeply divided into five ſegments above the germen, and permanent.
COROLLA propria pentapetala: *Petalis* lanceolatis, erectis, baſi connexis. *fig.* 2.	COROLLA: each floret compoſed of five lanceolate, upright *Petals*, connected at the baſe. *fig.* 2.
STAMINA: Filamenta quinque, ſubulata, brevia. Antheræ quinque, oblongæ, baſi connexæ. *fig.* 3.	STAMINA: five tapering ſhort Filaments; Antheræ five, oblong, connected at the baſe. *fig.* 3.
PISTILLUM: Germen ſubrotundum, inferum. Stylus filiformis, longitudine Corollæ. Stigma clavatum, purpureum. *fig.* 4, 5.	PISTILLUM: Germen roundiſh, below the Corolla. Style filiform, the length of the corolla. Stigma club-ſhaped and purpliſh. *fig.* 4, 5.
PERICARPIUM: Capsula ſubrotunda, quinquangularis, coronata calyce proprio, bilocularis.	SEED-VESSEL: a roundiſh Capsule, having five angles with two cavities, and crowned by the calyx proper to it.
SEMINA plura, ſubovata.	SEEDS numerous, ſomewhat ovate.

This little plant, which in its general appearance ſo much reſembles a Scabious, is very common on dry, ſandy ground, eſpecially about *Coomb Wood*, and *Hampſtead*, and moſt hilly ſituations near *London*, and elſewhere.

It varies much in ſize, and is ſometimes, though very rarely, found with white bloſſoms.

It flowers from *June* to *Auguſt*.

Linnæus remarks, that Bees are particularly fond of its flowers.

PANICUM CRUS GALLI. LOOSE PANIC-GRASS.

PANICUM *Lin. Gen. Pl.* TRIANDRIA DIGYNIA.
Cal. 3-valvis: valvula tertia minima.

PANICUM *Crus galli* ſpicis alternis conjugatiſque, ſpiculis ſubdiviſis, glumis ariſtatis hiſpidis, rachi quinquangulari. *Lin. Syſt. Vegetab.* p. 90. *Spec. Pl.* p. 83.
PANICUM ſpica remota, ſetis nullis. *Haller Hiſt.* n. 1544.
PANICUM *Crus galli. Scopoli Fl. Carn.* n. 70.
GRAMEN paniceum ſpica diviſa. *Bauh. Pin.* 8.
GRAMEN paniceum, ſpica diviſa, ariſtis longis armata. var. β. *Bauh. Pin.* 8.
PANICUM ſylveſtre Herbariorum. *Parkinſ.* 1154.
PANICUM *vulgare. Ger. emac.* 85. *Raii Syn.* p. 394. Panick Graſs with a divided Spike. *Hudſon Fl. Angl. ed.* 2. p. 24.

RADIX annua, fibroſa.

CAULES plerumque plures ex una radice, primo procumbentes, ſeu obliqui, demum ſubereƈti, pedales aut bipedales, tribus aut quatuor geniculis diſtinƈti.

FOLIA in humilioribus tres quatuorve uncias longa, lineas duas aut tres lata, in procerioribus ſemipedalia, vel etiam pedalia fere, lineas quatuor, aliquando et ſex ſemptemve lata, acuminata, carinata, lævia, marginibus minutiſſime denticulatis et ad baſin circa orem vaginæ piloſis; *Membrana* nulla; *Vagina* magna, ſtriata, compreſſa.

FLORES paniculati.

PANICULA palmaris, et ultra, e pluribus ſpicis compoſita, pallide vireſcens.

SPICÆ ſæpe ad duodecim, craſſæ, teretiuſculæ, plerumque ſimplices et alternæ, etiam ramoſæ et oppoſitæ, inferioribus ſeſquiuncialibus, magiſque remotis.

RACHIS quinquangularis, angulo quinto obſoleto, ad baſin ſpicarum ſetoſa.

FLORES ſecundi, turgidi.

CALYX trivalvis, valvula inferiore minore, floſculum recipiente, *fig.* 1. prima et ſecundâ æqualibus, nervoſis, mucronatis, hirſutis, alterâ plana, alterâ gibboſa. *fig.* 2, 3. *auƈt.*

COROLLA bivalvis, valvulis æqualibus, glabris, ovatis, alterâ alteram margine ſuâ ampleƈtente, *fig.* 4. intra valvulam calycis et corollæ, membrana tenuis, nunc acuta, nunc emarginata. *fig.* 5, 6.

STAMINA: FILAMENTA tria, capillaria, breviſſima; ANTHERÆ bifurcæ, purpuraſcentes. *fig.* 7.

PISTILLUM: GERMEN ſubrotundum; STYLI duo breviſſimi; STIGMATA plumoſa, purpuraſcentia. *fig.* 8.

SEMEN majuſculum, nitidum, glumis corollaceis tectum, hinc convexum, inde planum, *fig.* 9, 10. denudatum, *fig.* 11, 12, 13.

ROOT annual and fibrous.

STALKS generally ſeveral proceed from the ſame root, at firſt procumbent or oblique, finally nearly upright, from one to two feet in height, furniſhed with three or four joints.

LEAVES in the more humble plants three or four inches long, and from two to three lines in breadth; in the taller plants ſix inches, or nearly a foot in length, four lines, and ſometimes ſix or ſeven broad, tapering to a point, keeled, ſmooth, the edges very finely toothed, and about the mouth of the ſheath hairy; *Membrane* none; *Sheath* large, ſtriated and compreſſed.

FLOWERS in a panicle.

PANICLE a hand's breadth or more in length, of a pale green colour, compoſed of many ſpikes.

SPIKES often twelve in number, thick, roundiſh, generally ſimple and alternate, ſometimes alſo branched and oppoſite, the lowermoſt an inch and a half in length, longer and farther aſunder than any of the reſt.

RACHIS having five angles, the fifth leſs perceptible than the others, briſtly or hairy at the baſe of the ſpikes.

FLOWERS growing one way and turgid.

CALYX compoſed of three valves, the lowermoſt or third valve very ſmall, receiving the floſcule, *fig.* 1. the firſt and ſecond equal, rib'd, pointed, hirſute, the one flat, the other gibbous. *fig.* 2, 3. *magnified.*

COROLLA compoſed of two valves, the valves equal, ſmooth, ovate, the one with its margin embracing the other, *fig.* 4. betwixt the valve of the calyx and the corolla a thin membrane is obſervable, which is ſometimes notched, and ſometimes pointed. *fig.* 5, 6.

STAMINA: three very ſlender and ſhort FILAMENTS; ANTHERÆ forked and purpliſh. *fig.* 7.

PISTILLUM: GERMEN roundiſh; STYLES two, very ſhort; STIGMATA feathered and purpliſh. *fig.* 8.

SEED rather large, ſhining, covered by the valves of the corolla, round on one ſide, and flat on the other, *fig.* 9, 10. taken from its covering. *fig.* 11, 12, 13.

Near the ſame ſpot where the *Panicum ſanguinale* is found, this rare ſpecies alſo makes its appearance, a ſpace of about twenty yards ſquare was laſt autumn covered chiefly with this graſs, and the *Panicum viride*; in other parts of the fields it more rarely occurs; being an annual it may vary its particular place of growth, but by a diligent ſearch will probably always be found in ſome part of *Batterſea Fields*; Mr. RAY mentions it as having been found between *Deptford* and *Greenwich* in Garden Ground, alſo in a lane by the *Neat-houſe Gardens Chelſea*, and by the rivulet ſide near *Petersfield, Hampſhire.* He is ſurely miſtaken in ſaying *aquoſis deleƈtatur.* Mr. HUDSON deſcribes it as growing near *Martha's Chapel, Guildford.*

Botaniſts make two principal varieties of it, viz. one with awns, and another without; the latter, which is the ſtate in which we have figured it, moſt frequently occurs; it varies alſo in its colour, being ſometimes found with ſpikes of a purpliſh hue.

It has a very great affinity to the *Panicum Crus corvi*, a foreign graſs, but is too ſingular to be miſtaken for any *Engliſh* Panic.

Affording a large quantity of ſeeds of conſiderable magnitude, it is ſought for with great avidity by ſparrows and other ſmall birds.

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Panicum Crus Galli.

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Panicum sanguinale.

PANICUM SANGUINALE. COCK'S-FOOT PANIC-GRASS.

PANICUM *Lin. Gen. Pl.* TRIANDRIA DIGYNIA.
Cal. 3-valvis: valvula tertia minima.
PANICUM *ſanguinale* ſpicis digitatis baſi interiore nodoſis, floſculis geminis muticis, vaginis foliorum punctatis. *Lin. Syſt. Vegetab.* p. 90. *Sp. Pl.* 84.
DIGITARIA foliis ſubhirſutis, caule debili, ſpicis verticillatis. *Haller Hiſt.* n. 1526.
DIGITARIA *ſanguinalis. Scopoli Fl. Carn.* n. 72.
GRAMEN dactylon latiore folio. *Bauhin Pin.* 8.
ISCHÆMON ſylveſtre latiore folio. *Parkinſ.* 1178.
ISCHÆMON vulgare. *Ger. emac.* 27. Cock's-foot-graſs. *Raii Syn.* p. 399. *Scheuch. Agroſt.* 101. *Schreb. Agroſt.* t. 16. *Hudſon Fl. Angl. ed.* 2. p. 25.

RADIX annua, fibroſa.

CULMI ex una radice plures, ſpithamæi, pedales, ſubrubentes, ſubinde ramoſi, adſcendentes, infracti, tenues valde et debiles, quatuor plerumque geniculis diſtincti.

FOLIA uncialia, ſeſquiuncialia, et biuncialia, lineas duas aut duas cum dimidia lata, acuta, ad unum latus ſæpe undulata, ſuperne et inferne raris pilis hirſuta, marginibus ad lentem minutiſſime ſerrulatis; vagina ſtriata, valde piloſa, pilis e punctis prominulis prodeuntibus.

SPICÆ ternæ, quaternæ, et quinæ plerumque, in cultis ſæpe plures, digitatim ſummo culmo inſidentes, ſeſquiunciam ad quatuor uncias longæ, filiformes, vel eodem loco oriundæ omnes, vel alternatim e ſummo culmo prodeuntes, et exiguo ab invicem ſpatio diſcretæ, purpureæ, aut ex purpureo et viridante mixtæ.

SPICULÆ ſecundæ, binæ, rachi adpreſſæ, pedicellatæ, pedicello altero longiore, longitudine ſpiculæ, ovato-lanceolatæ, acutæ, nunc purpuraſcentes, nunc virides. *fig.* 1, 2, 3, 4. *auct.*

CALYX trivalvis, perſiſtens, infima minima, breviſſima, nudo oculo vix conſpicua, *fig.* 2. ſecunda et tertia oppoſitis, inæqualibus, acutis, nervoſis, margine ſcabris, ſuperiore longitudine corollæ quam margine ſuo amplectitur, inferiore dimidio breviore. *fig.* 3, 4.

COROLLA: bivalvis, valvulis æqualibus, glabris, alterâ alteram recipiente, *fig.* 8. ubi membranula ad baſin earum pingitur, *fig.* 6, 7. disjunctæ apparent.

STAMINA: FILAMENTA tria, capillaria, corollâ paulo longiora; ANTHERÆ breves, parvæ, purpuraſcentes, utrinque bifurcæ. *fig.* 9.

PISTILLUM: GERMEN oblongum; STYLI duo, filiformes, longitudine ſtaminum; STIGMATA plumoſa, purpurea. *fig.* 10.

SEMEN minimum, oblongum glumis calycinis æque ac corollaceis incluſum, *fig.* 11, 12. denudatum, *fig.* 13. *magnit. nat. fig.* 14, 15. *auct.*

ROOT annual and fibrous.

STALKS ſeveral from one root, a ſpan or a foot in height, of a reddiſh colour, ſometimes branched, bending upward, crooked, very ſlender and weak, and generally furniſhed with four joints.

LEAVES an inch, an inch and a half, or two inches in length, and from two to two lines and a half in breadth, pointed, often waved on one ſide, on both ſides beſet with a few hairs, the edges when magnified very finely ſawed; the ſheath ſtriated, very hairy, the hairs proceeding from little prominent points.

SPIKES ſitting on the top of the ſtem, generally three, four or five together, often more in cultivated places, branching out like fingers, from one inch and a half to four inches in length, filiform, all of them proceeding from the ſame point, or growing alternately, leaving a ſmall ſpace betwixt them, of a dark purple colour, or purple and green mixed together.

SPICULÆ growing one way, preſſed to the rachis, ſtanding on foot-ſtalks, the longeſt of which is of the length of one of the ſpiculæ, ovato-lanceolate and pointed, ſometimes purpliſh, and ſometimes green. *fig.* 1, 2, 3, 4. *magnified.*

CALYX compoſed of three valves, and permanent, the lowermoſt very minute and ſhort, ſcarcely perceptible by the naked eye, *fig.* 2. the ſecond and third oppoſite, unequal, pointed, rib'd, rough on the edges, the upper one the length of the corolla, which it enfolds with its margin, the lower one half its length. *fig.* 3, 4.

COROLLA: compoſed of two valves which are equal and ſmooth, the one receiving the other, *fig.* 8. where a ſmall membrane is painted at their baſe; at *fig.* 6. and 7. they appear disjoin'd.

STAMINA: three FILAMENTS, very ſlender, a little longer than the corolla; ANTHERÆ ſmall, ſhort, purpliſh, forked at each end. *fig.* 9.

PISTILLUM: GERMEN oblong; STYLES two, filiform, the length of the ſtamina; STIGMATA feather'd and purple. *fig.* 10.

SEED very ſmall, oblong, incloſed by the glumes of the calyx, as well as of the corolla, *fig.* 11, 12. ſtripped of theſe, *fig.* 13. of its natural ſize, and magnified at *fig.* 14, 15.

Modern Botaniſts are divided in their opinions reſpecting the genus of this plant, LINNÆUS, SCHREBER, and others conſidering it as a *Panicum*; ADANSON, HEISTER, HALLER and SCOPOLI arranging it under a new genus, viz. *Digitaria*, a name adapted to the particular diſpoſition of its ſpikes, but as that particular diſpoſition has little to do with its generic character, and as it has a triphyllous calyx, which LINNÆUS, with much propriety, conſiders as a principal character of the *Panicum*, we follow him in preference to the others, however reſpectable. We may obſerve, that the exterior leaf forming this triphyllous calyx is ſo very minute, that it may eaſily be overlooked.

The figures and deſcriptions, quoted by LINNÆUS, induce us to conſider this ſpecies as the *ſanguinale*, rather than his ſpecific deſcription, which certainly does not well accord with our plant. The *vaginæ punctatæ* are not mentioned either by HALLER, SCHEUCHZER, or SCOPOLI; the hairs certainly iſſue from little prominent points, ſcarcely viſible, unleſs magnified. If LINNÆUS means theſe, they are, in our apprehenſion, too minute to form a ſpecific character on.

According to the obſervations of botanic writers, this ſpecies is very univerſal, being found not only in *Europe*, but *Aſia* and *America*; nevertheleſs, it is not general throughout *England*. It is ſaid to grow about *Elden* in *Suffolk*, at *Witchingham* near *Norwich*, near *Martha's Chapel* by *Guildford*, and in the Gardener's grounds near *Batterſea*; in the latter place I found it laſt *September*, in great plenty; but in one part of the fields only, viz. among the *French* beans, and on the Aſparagus beds, in the Weſtern corner of the fields, at no great diſtance from the Church.

MATTHIOLUS relates, that in *Carniola* the ſeeds are collected for food, but this is flatly contradicted by SCOPOLI; indeed, for this purpoſe, it appears much inferior to many others of the ſame genus.

Its name of *ſanguinale* is not taken from its colour, but from an idle trick which the boys in *Germany* have of pricking their noſtrils with the ſpiculæ of this graſs, till they draw blood.

CICHORIUM INTYBUS. BLUE SUCCORY.

CICHORIUM *Lin. Gen. Pl.* SYNGENESIA POLYGAMIA ÆQUALIS.
Recept. ſubpaleaceum. *Cal.* calyculatus. *Pappus* ſub-5-dentatus, obſolete piloſus.
Raii Syn. Gen. 6. HERBÆ FLORE COMPOSITO NATURA PLENO LACTESCENTES.
CICHORIUM *Intybus* floribus geminis ſeſſilibus, foliis runcinatis. *Lin. Syſt. Vegetab.* p. 602. *Sp. Pl.* p. 1142. *Fl. Suec.* n. 711.
CICHORIUM foliis pinnatis, pinnis triangularibus dentatis, floribus ſeſſilibus. *Haller Hiſt.* 1.
CICHORIUM *Intybus. Scopoli Fl. Carn.* n. 991.
CICHORIUM ſylveſtre ſive officinarum. *Bauhin Pin.* 126.
INTYBUS ſylveſtris. *Camer. epit.* 285.
CICHORIUM ſylveſtre. *Ger. emac.* 284. *Parkinſ.* 776. *Raii Syn.* p. 172. Wild Succory. *Hudſon Fl. Angl. ed.* 2. p. 348.

RADIX perennis, externe luteſcens, fuſiformi-cylindrica, etiam ramoſa, craſſitie digiti, ſpithamæa, ſæpe pedalis, deſcendens, fibrilloſa, fibrillis ſparſis, lacteſcens, lacte albo.	ROOT perennial, externally of a yellowiſh colour, tapering very gradually to a point, alſo branched, the thickneſs of the finger, a ſpan, and often a foot in length, ſtriking downward, furniſhed with few ſmall fibres, milky, the milk of a white colour.
CAULIS pedalis, ad tripedalem, erectus, rigidus, tortuoſus, ſcabridus, plerumque ramoſiſſimus.	STALK from one to three feet in height, upright, rigid, crooked, roughiſh to the touch, and generally very much branched.
FOLIA radicalia plurima, taraxaci, ſubaſpera, caulina læviora, ſubamplexicaulia, alterna.	LEAVES at the root numerous, like thoſe of Dandelion, roughiſh, thoſe of the ſtalk ſmoother, alternate, partly ſurrounding the ſtem.
FLORES plerumque bini, ſpecioſi, ſeſſiles, e foliorum ſupremorum alis.	FLOWERS growing generally in pairs, ſhowy, ſeſſile, ſpringing from the alæ of the uppermoſt leaves.
CALYX *communis* calyculatus, ſquamis exterioribus quinque, ovatis, acutis, ſubpatentibus, pilis glanduliferis ciliatis; interioribus octo circiter, lineari-lanceolatis, æqualibus, cylindrum anguloſum, viſcoſum, conſtituentibus. *fig.* 1, 2, 3, 4.	CALYX common to many florets, compoſed of a double ſet of ſquamæ or leaves, the outermoſt of which are five in number, ovate, pointed, ſomewhat ſpreading, edged with glandular hairs, the innermoſt about eight, narrow, equal, forming an angular, clammy cylinder. *fig.* 1, 2, 3, 4.
COROLLA compoſita, plana, uniformis, Corollulis hermaphroditis, viginti circiter, cæruleis, *Tubus* cylindricus, brevis, albus, apice dilatatus et piloſus; *Limbus* planus, quinque-dentatus, ſubtus nervoſus et villoſus. *fig.* 5.	COROLLA compound, flat, regular, Florets hermaphrodite, abont twenty in number, of a blue colour; *Tube* cylindrical, ſhort, white, dilated at top and hairy; *Limb* flat, with five teeth at the extremity, on the under ſide rib'd and villous. *fig.* 5.
STAMINA: FILAMENTA quinque alba, capillaria, manifeſte libera; ANTHERÆ ſaturate cæruleæ, in tubum cylindricum, angulatum coalitæ. *fig.* 6.	STAMINA: five FILAMENTS, of a white colour, very ſlender, manifeſtly unconnected; ANTHERÆ of a deep blue colour, forming an angular, cylindrical tube. *fig.* 6.
PISTILLUM: GERMEN ſubconicum, album, pilis breviſſimis coronatum; STYLUS filiformis, albus; STIGMATA duo, cærulea, revoluta. *fig.* 7.	PISTILLUM: GERMEN ſomewhat conic, crowned with very ſhort hairs; STYLE thread-ſhaped, white; STIGMATA two, of a blue colour, and rolled back.
SEMINA plurima, in fundo calycis, nuda, ſubpentagona, margine pilis breviſſimis ciliata. *fig.* 8. auct.	SEEDS numerous in the bottom of the calyx, naked, irregularly five cornered, the edge crowned with very ſhort hairs. *fig.* 8. magnified.

That beautiful plants are often noxious weeds, agriculturally conſidered, we have already noticed in the Biſtort, the field Convolvulus, the corn Poppy, and the perennial Perſicaria; the blue Succory adds another to the catalogue.

Batterſea Fields, which exhibit bad huſbandry in perfection, produce this plant moſt plentifully; it flowers in *July*, *Auguſt* and *September*; like the docks it increaſes itſelf much by ſeed, and is to be extirpated in the ſame manner.

Some botaniſts have erroneouſly ſuppoſed this ſpecies of Succory to be the Endive in its wild ſtate, but its ſtrong perennial root ſufficiently evinces the contrary. The *Cichorium Endivia*, which is an annual or biennial, and grows wild in the Corn-fields of *Spain*, together with the *Intybus**, is undoubtedly the parent of the cultivated *Endive*, it is not ſo clear which of the two is the plant celebrated by HORACE as conſtituting a part of his ſimple diet,

> —— —— *me paſcunt Olivæ*
> *Me Cichorea, leveſque Malvæ.*

It is not unfrequently found wild with white flowers, and it has been diſcovered that the fine blue colour of the petals is convertible into a brilliant red by the acid of Ants†; Mr. MILLER the Engraver aſſured me, that in *Germany* the boys often amuſed themſelves in producing this change of colour by placing the bloſſoms in an ant hill.

Wild Succory is an uſeful detergent, aperient, and attenuating medicine; acting without much irritation, tending rather to cool than heat the body, and at the ſame time corroborating the tone of the inteſtines. The juice taken in large quantities ſo as to keep up a diarrhæa, and continued for ſome weeks, has been found to produce excellent effects in ſcorbutic and other chronical diſorders. *Lewis's Diſp.* p. 125.

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* *D'Aſſo Stirp. Arragon*, p. 113.

† *Trag. ad Brunfels.* II. p. 274.

Cichorium Intybus.

Clematis Vitalba.

CLEMATIS VITALBA. TRAVELLER'S JOY.

CLEMATIS *Lin. Gen. Pl.* POLYANDRIA PENTAGYNIA.

Cal. 0. *Petala* 4. rarius 5. *Sem.* caudata.

Raii Syn. Gen. 15. HERBÆ SEMINE NUDO POLYSPERMÆ.

CLEMATIS *Vitalba* foliis pinnatis: foliolis cordatis ſcandentibus. *Lin. Syſt. Vegetab.* p. 426. *Spec. Pl.* 766.

CLEMATIS caule ſcandente, foliis pinnatis, ovato lanceolatis, petalis coriaceis. *Haller Hiſt.* n. 1142.

CLEMATIS *Vitalba. Scopoli Fl. Carn.* p. 669.

CLEMATIS ſylveſtris latifolia. *Bauh. Pin.* 300.

CLEMATIS latifolia ſeu Atragene quibuſdam. *J. B.* II. 125.

CLEMATIS ſylveſtris latifolia ſeu Viorna. *Parkinſ.* 380.

VIORNA *Ger. emac.* 886. *Raii Syn.* 258. Great Wild Climber, or Traveller's Joy. *Hudſon Fl. Angl.* *ed.* 2. p. 238.

CAULES plurimi, perennantes, ope petiolorum, frutices arboreſque vicinos, ſcandentes; junioribus hirſutulis, flexilibus, purpureis, nodis incraſſatis; per ætatem craſſitie digiti ſeu pollicis, profunde ſulcatis, exalbidis, fruticoſis.	STALKS numerous, perennial, by means of the leaf-ſtalks climbing the adjoining ſhrubs and trees, the younger ones ſlightly hirſute, flexible, purple; the joints enlarged; by age attaining the thickneſs of the finger or thumb, deeply grooved, of a whitiſh colour and ſhrubby.
FOLIA pinnata, oppoſita, patentia; pinnis duorum parium cum impari, remotis, cordatis, ſubacuminatis, integris, ſerratis, lobatiſve, e viridi flaveſcentibus, nitidulis, ſubtus venoſis.	LEAVES pinnated, oppoſite, ſpreading, the pinnæ conſiſting of two pair with an odd one, heart-ſhaped, remote from each other, and running out to a point, either entire, ſerrated, or lobed, of a yellowiſh green colour, ſomewhat ſhining, and veiny on the under ſide.
PETIOLI contorti, vicem cirrhi ſupplentes.	LEAF-STALKS twiſted, anſwering the purpoſe of a tendril.
RACEMI florales ex foliorum alis, conjugati, folioſi, ramoſi, trifidi, dichotomi.	FLOWERING-BRANCHES proceeding from the alæ of the leaves, in pairs, leafy, branched, dividing firſt into three, and then into two ſmaller branches.
FLORES pallide ſulphurei, odorati.	FLOWERS of a pale ſulphur colour, and ſweet-ſcented.
CALYX nullus.	CALYX none.
COROLLA: PETALA quatuor, cruciata, oblonga, ſubemarginata, patentia, ſubrevoluta, villoſa, ſuperne pallide ſulphurea, inferne vireſcentia. *fig.* 1.	COROLLA: four PETALS croſs-ſhaped, oblong, ſlightly nicked at the end, ſpreading, ſomewhat rolled back, villous, on the upper ſide of a pale ſulphur colour, underneath greeniſh. *fig.* 1.
STAMINA: FILAMENTA plurima, filiformia, ſubcompreſſa, alba, longitudine corollæ, erecta; ANTHERÆ oblongæ, albidæ. *fig.* 2.	STAMINA: FILAMENTS numerous, filiform, ſomewhat flattened, white, the length of the corolla, upright; ANTHERÆ oblong, whitiſh. *fig.* 2.
PISTILLUM: GERMINA plurima, minima, ſubrotunda, compreſſa, deſinentia in tot STYLOS ſubulatos, ſericeos, longitudine ſtaminum; STIGMATA ſimplicia. *fig.* 3.	PISTILLUM: GERMINA numerous, very minute, roundiſh, flattened, terminating in as many tapering, ſilky STYLES, the length of the ſtamina; STIGMATA ſimple. *fig.* 3.
SEMINA plurima, nuda, ſubrotunda, compreſſa, caudata. *fig.* 4.	SEEDS numerous, naked, roundiſh, flatten'd, and terminated by a long feathered tail. *fig.* 4.

The *Clematis*[*] *Vitalba*[†] is a very common plant in the more ſouthern parts of *Europe*, it delights in a ſituation that is elevated, and in a ſoil that is chalky, hence it is found more plentifully in ſome counties than in others; it is not frequent very near *London*, but abounds in the hedges around *Croydon*, and may be found, though more ſparingly, about *Charlton*, alſo on the left hand ſide of the road leading from New-Croſs Turnpike to *Lewiſham*, near the ſpot where the *Dipſacus piloſus* grows: it flowers in *Auguſt*, and ornaments the hedges with its large branches of downy ſeeds[‡] till the approach of winter.

Being a Climber, handſome both in its foliage and ſeeds, and rapid in its growth, it is often made uſe of for Arbours and Bowers in Gardens and Pleaſure-Grounds; for this purpoſe young plants ſhould be choſen raiſed from ſeeds. This quality, which is an uſeful one under proper reſtrictions, often becomes a noxious one in hedges, where it is apt to ſuffocate and deſtroy thoſe trees and ſhrubs which are planted for defence.

School-boys often dry the ſtems, when about the thickneſs of the finger, and draw ſmoke through them inſtead of cane. The Farmer alſo uſes the green ſtalks to faſten his gates with, &c.

HALLER quotes ſeveral authorities to ſhew the *Clematis* poſſeſſed of conſiderable acrimony, ſufficient even to raiſe bliſters on the ſkin, for which purpoſe it has ſometimes been employed medicinally. A plant of the ſame genus, viz. *Flammula Jovis (Clematis recta Linnæi)* has been introduced into the laſt edition of the *Edinburgh* Diſpenſatory, on the authority of Dr. STORCK, who recommends the leaves to be externally applied, in ſordid, ichorous, fungous, and cancerous ulcers, and caries of the bones; and preparations of them to be taken internally in the head-ach, nocturnal pains of the bones, venereal diſeaſe, itch and melancholy.

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[*] So called from κλημα, *ſarmentum*, a vine twig.

[†] Quaſi *Vitis alba*, or white Vine.

[‡] Hence in ſome parts of *England* the plant is called *Old Man's beard*.

CHIRONIA CENTAURIUM. CENTAURY.

CHIRONIA *Lin. Gen. Pl.* PENTANDRIA MONOGYNIA.

Cor. rotata. *Piſtillum* declinatum. *Stamina* tubo corollæ inſidentia. *Antheræ* demum ſpirales. *Pericarp.* 2-loculare

Raii Syn. Gen. 18. HERBÆ FRUCTU SICCO SINGULARI FLORE MONOPETALO.

CHIRONIA *Centaurium.*

GENTIANA *Centaurium* corollis quinquefidis infundibuliformibus, caule dichotomo, piſtillo ſimplici. *Lin. Syſt. Vegetab.* p. 122. *Sp. Plant.* p. 332. *Fl. Suec.* n. 232.

GENTIANA caule dichotomo; floribus infundibuliformibus, ſtriatis, quinquefidis. *Haller. Hiſt.* n. 648.

GENTIANA *Centaurium. Scopoli Fl. Carn.* n. 293.

CENTAURIUM minus *Bauh. Pin.* 278.

CENTAURIUM minus vulgare. *Parkins.* 272.

CENTAURIUM parvum. *Gerard. emac.* 547. *Raii Syn.* p. 286. Small Purple Centory. *Hudſon Fl. Angl.* ed. 2. p. 102. *Lightfoot Fl. Scot. p.* 152.

RADIX annua, fibroſa, lignoſa, flaveſcens.	ROOT annual, fibrous, woody, and of a yellowiſh colour.
CAULIS ſpithamæus, et ultra, erectus, plerumque, ſimplex, glaber, anguloſus.	STALK about ſeven inches high or more, upright, generally ſimple, ſmooth, and angular.
FOLIA oppoſita, ſeſſilia, glabra, radicalia oblonga, apice obtuſa, baſi anguſtata, caulina ovato-lanceolata, erecta, trinervia, ſuperioribus ſæpe incurvis.	LEAVES oppoſite, ſeſſile, ſmooth, thoſe of the root oblong, blunt at the point and narrowed at the baſe; thoſe of the ſtalk narrow, pointed, upright, three-ribbed, the uppermoſt often bent inward.
FLORES roſei, corymboſi, erecti, ſeſſiles.	FLOWERS roſe-coloured, growing in a corymbus, upright, and ſeſſile.
CALYX: PERIANTHIUM monophyllum, quinquefidum, erectum, corollæ ſubagglutinatum, perſiſtens, laciniis ſubulatis, ſubtriangularibus, membranâ connexis. *fig.* 1, 2. *auct.*	CALYX: a PERIANTHIUM of one leaf, divided into five ſegments, upright, ſlightly glued to the corolla, permanent, the ſegments tapering to a point, ſomewhat triangular, connected by a membrane. *fig.* 1, 2. *magnified.*
COROLLA monopetala, infundibuliformis, *tubus* cylindraceus, ſtriatus, tenuiſſimus, calyce duplo longior, *limbus* quinquepartitus, roſeus, laciniis ovatis, patentibus. *fig.* 3.	COROLLA monopetalous, funnel-ſhaped, the *tube* cylyndrical, ſtriated, extremely thin, twice the length of the calyx, *limb* divided into five ſegments, of a roſe-colour, the ſegments ovate and ſpreading. *fig.* 3.
STAMINA: FILAMENTA quinque, alba, filiformia, ex apice tubi enata. ANTHERÆ oblongæ, incumbentes, flavæ, demum ſpiraliter contortæ. *fig.* 4, 5, 6.	STAMINA: five FILAMENTS, white, thread-ſhaped, ſpringing from the top of the tube. ANTHERÆ oblong, incumbent, of a yellow colour, finally twiſted. *fig.* 4, 5, 6.
PISTILLUM: GERMEN oblongum, tubum corollæ implens. STYLUS albus, filiformis, germine dimidio brevior, declinatus, aliquando bifidus. STIGMA craſſum, bilobum, villoſum, *fig.* 7, 8, 9.	PISTILLUM: GERMEN oblong, filling the tube of the corolla. STYLE white, of equal thickneſs throughout, half the length of the germen, inclining to one ſide, ſometimes bifid. STIGMA thick, compoſed of two lips and villous. *fig.* 7, 8, 9.
PERICARPIUM: CAPSULA oblonga, acuta, nitida, tubo corollæ obtecta, bilocularis, bipartibilis.	SEED-VESSEL: a CAPSULE, of an oblong ſhape, pointed, ſhining, covered by the tube of the corolla, diviſible into two parts, with a cavity in each.
SEMINA numeroſa, parva, ſubrotunda, flaveſcentia.	SEEDS numerous, ſmall, roundiſh, of a yellowiſh colour.

Thoſe who have been accuſtomed to conſider this well-known plant as a *Gentiana*, will be ſtartled at ſeeing it here firſt announced as a *Chironia*; but when they come attentively to examine its parts of fructification, they will wonder how they could ſo readily acquieſce in joining it to a genus with which its ſtructure is wholly irreconcileable. It agrees perfectly with LINNÆUS's character of the genus *Chironia*, the eſſence of which conſiſts in its *twiſted Antheræ*; and it is worthy of obſervation, that the bloſſoms of two of the *Chironia's*, not unfrequently met with in the gardens of the curious, are of the ſame colour as the Centaury. Theſe facts have induced me to add a new genus to the Engliſh Catalogue, whereby this plant fortunately aſſumes its proper name*.

The Centaury grows wild in dry and barren fields, on heaths by the ſides of hedges, and ſometimes in woods, where it uſually acquires a greater height. In the neighbourhood of *Charlton* and *Coombe Woods* it is not unfrequent, and flowers in *July* and *Auguſt*.

A variety, with white flowers, is not uncommon.

This herb is extremely bitter, with a diſagreeable taſte, whence, Baron HALLER obſerves, the ancients called it *fel terræ*, or *gall of the earth*. From an idea, however, that all bitters are good ſtomachic medicines, it has acquired no ſmall degree of medicinal fame, and is particularly recommended in all weakneſſes of the Stomach; alſo in the Jaundice, Green-ſickneſs, Worms, Agues, Gout, Scurvy, &c.

It may be given in ſubſtance to a drachm; in infuſion or decoction to two ounces; the extract to a ſcruple.

Authors have remarked, that it is a plant very difficult of cultivation.

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* Centaury has it name κενταυριον or κενταυρειον from *Chiron* the Centaur, " Centaurea curatus dicitur Chiron, cum Herculis excepti hoſpitio " pertractandi arma ſagitta excidiſſet in pedem: quare aliqui *Chironion* vocant." *Plin. l.* 25. *c.* 6. *p.* 635.

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Chironia Centaurium.

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Galeobdolon Galeopsis.

GALEOBDOLON GALEOPSIS. YELLOW ARCHANGEL.

GALEOBDOLON *Hudſon Fl. Angl.* DIDYNAMIA GYMNOSPERMIA.

Raii Syn. Gen. 24. SUFFRUTICES ET HERBÆ VERTICILLATÆ.

GALEOBDOLON *luteum.* *Hudſon. Fl. Angl. ed.* 2. p. 258.

GALEOPSIS *Galeobdolon* verticillis ſexfloris; involucro tetraphyllo. *Lin. Syſt. Vegetab.* p. 446. *Spec. Pl.* p. 810.

CARDIACA foliis petiolatis, cordatis, verticillis folioſis. *Haller. Hiſt.* 275.

LEONURUS *Galeobdolon.* *Scopoli Fl. Carn.* n. 705.

LAMIUM folio oblongo luteum. *Bauh. Pin.* 231. Lamium luteum. *Ger. emac.* 671. *Parkins* 606. *Raii Syn.* p. 240. Yellow Archangel or Dead Nettle.

GALEOPSIS *Galeobdolon.* *Lightfoot Fl. Scot.* p. 310.

RADIX perennis, inæqualis, fibras plurimas, majuſculas, in terram demittens.	ROOT perennial, irregular, ſending down ſeveral largiſh fibres.
CAULES plures, tetragoni, hirſutuli, *floriferi* ſuberecti, pedales ſeu bipedales, *ſteriles* peractâ floreſcentiâ, in longum extenduntur, et poſtea humi repent.	STALKS ſeveral, four-cornered, ſomewhat hirſute; thoſe producing flowers nearly upright, a foot or two feet high; thoſe deſtitute of bloſſoms, after the flowering is over, are extended to a great length, and afterwards creep on the ground.
FOLIA oppoſita, petiolata, hirſutula, inæqualiter ſerrata, venoſa, inferioribus cordatis, ſuperioribus ovatis, acutis, ſeſſilibus.	LEAVES oppoſite, ſtanding on foot-ſtalks, ſlightly hirſute, unevenly ſerrated, and veiny; the lower ones heart-ſhaped, the upper ones ovate, pointed, and ſeſſile.
FLORES verticillati, lutei.	FLOWERS growing in whirls, of a yellow colour.
VERTICILLI ſex, decem aut duodecim flori.	WHIRLS containing from ſix to ten or twelve flowers.
CALYX: *Involucrum* verticillis ſubjectum, foliolis tot quot floribus, linearibus, acutis, rigidulis, ad lentem ciliatis, *fig.* 2.	CALYX: an *Involucrum* placed under the whirls, compoſed of as many leaves as there are flowers, the leaves linear, pointed, ſomewhat rigid, when magnified fringed at the edge. *fig.* 2.
CALYX: PERIANTHIUM monophyllum, ſubcampanulatum, quinquedentatum, hirſutulum, lineis decem elevatis notatum, alternis obſoletis, dentibus ſubæqualibus, acuminatis, ſuperiore erecto, diſtanti, duobus inferioribus reflexopatulis. *fig.* 1.	CALYX: a PERIANTHIUM of one leaf, ſomewhat bell-ſhaped, having five teeth, ſlightly hirſute, marked with ten elevated lines, alternately fainteſt, the teeth nearly equal, having long points, the uppermoſt upright, and at a diſtance from the reſt; the two lowermoſt ſpreading open and turned ſomewhat back. *fig.* 1.
COROLLA monopetala, ringens; *tubus* calyce paulo longior, intus purpureus et piloſus; *labium ſuperius* erectum, longum, fornicatum, villoſum, villiſque ciliatum; *inferius* trifidum, laciniis inæqualibus, maculatis, mediâ productiore. *fig.* 3, 4.	COROLLA monopetalous and ringent; *tube* a little longer than the calyx, purple and hairy within; *upper lip* upright, long, arched, villous, and edged with woolly hairs; the lowermoſt divided into three unequal ſegments which are ſpotted, the middle one longeſt. *fig.* 3, 4.
STAMINA: FILAMENTA quatuor, ſubulata, flava, ſub labio ſuperiore. ANTHERÆ bilobæ, purpuraſcentes. POLLEN albidum. *fig.* 5, 6.	STAMINA: four FILAMENTS tapering, of a yellow colour, under the upper lip. ANTHERÆ compoſed of two lobes and purpliſh. POLLEN whitiſh. *fig.* 5, 6.
PISTILLUM: GERMEN quadripartitum. STYLUS filiformis, purpureus. STIGMA bifidum, acutum. *fig.* 7.	PISTILLUM: GERMEN divided into four parts. STYLE filiform and purple. STIGMA bifid and pointed. *fig.* 7.
SEMINA quatuor, e fuſco nigricantia, nitidula, triquetra, apice truncata in fundo calycis. *fig.* 9.	SEEDS four, of a browniſh black colour, ſomewhat ſhining, three cornered, cut off at top, remaining in the bottom of the calyx. *fig.* 9.

LINNÆUS, though he enumerates this plant with the *Galeopſis* tribe, ſeems to think it not perfectly reconcileable with the reſt. HALLER and SCOPOLI diſagree in their opinions reſpecting it; the one conſidering it as a *Cardiaca*, the other as a *Leonurus*. Mr. HUDSON, whom we have followed in this inſtance, in the laſt edition of his *Flora Anglica*, makes a ſeparate genus of it under the name of *Galeobdolon*; we adopt the trivial name of *Galeopſis* inſtead *luteum*, with a view of making as little innovation as poſſible in names.

It is always found in woods and ſhady places. In ſome parts of *England* it is frequent, but not in others: we find it tolerably plentiful in *Charlton*, and ſome other Woods about town, flowering in *May* and *June*.

The foliage is ſometimes variegated, in which ſtate I have obſerved it make a beautiful appearance in a garden. In cultivating this, as well as all other plants, attention ſhould be paid to their natural place of growth.

MALVA MOSCHATA. MUSK MALLOW.

MALVA *Lin. Gen. Pl.* MONADELPHIA POLYANDRIA.
Cal. duplex: exterior triphyllus. *Arilli* plurimi, monoſpermi.
Raii Syn. Gen. 15. HERBÆ SEMINE NUDO POLYSPERMÆ.
MALVA *moſchata* caule erecto, foliis radicalibus reniformibus inciſis; caulinis quinquepartitis pinnato-multifidis. *Lin. Syſt. Vegetab.* p. 523. *Spec. Pl.* p. 971. *Fl. Suec.* n. 629.
MALVA foliis radicalibus reniformibus, inciſis, caulinis quinquepartitis pinnatis, pinnis dentatis. *Haller. Hiſt.* n. 1072.
MALVA *Moſchata*. *Scopoli Fl. Carn.* n. 861.
MALVA montana ſive Alcea rotundifolia laciniata. *Col. Ecphr.* 1. p. 148. t. 147.
ALCEA folio rotundo laciniato. *Bauh. Pin.* 316.
ALCEA tenuifolia criſpa. I. B. II. *App.* 1067. *Raii Syn.* p. 253. *Hudſon. Fl. Angl. ed.* 2. p. 308. *Lightfoot Fl. Scot.* p. 376.

RADIX perennis, albida, ſublignoſa, difficillime eruta.	ROOT perennial, whitiſh, ſomewhat woody, and with difficulty pulled up.
CAULIS: ex una radice caules naſcuntur plurimi, bipedales, ſuberecti, ramoſi, teretes, fiſtuloſi, hirſuti, punctis purpureis prominulis adſperſi, e quibus pili prodeunt.	STALK: from one root ariſe ſeveral ſtalks, about two feet high, nearly upright, branched, round, hollow, hirſute, ſprinkled with purple prominent points, from which the hairs iſſue.
FOLIA alterna, petiolata, inferiora plerumque ſex partita, laciniis pinnatifidis, multifido-laciniatis, hirſutulis, apice ſubacutis, ſuperiora brevius petiolata, in pauciores et tenuiores lacinias diviſa.	LEAVES alternate, ſtanding on foot-ſtalks, the lower ones generally deeply divided into ſix ſegments, which are pinnatifid and ſub-divided into many others, ſlightly hirſute, and pointed at the tips, the upper ones ſtanding on ſhorter foot-ſtalks, and divided into fewer and narrower ſegments.
STIPULÆ utrinque binæ, erectæ, lanceolatæ, hirſutæ, marginæ undulatæ.	STIPULÆ two on each ſide, upright, lanceolate, hirſute, waved on the edge.
FLORES magni, ſpecioſi, carnei.	FLOWERS large, ſhowy, and fleſh-coloured.
PEDUNCULI unciales, teretes, piloſi.	FLOWER-STALKS an inch in length, round and hairy.
CALYX: PERIANTHIUM duplex, inferius triphyllum, foliolis lanceolatis, ſuperius quinquefidum, ovato-acutum, ſæpe laciniatum, punctatum, hirſutum, margine ſerrato glanduloſum. *fig.* 1.	CALYX: a double PERIANTHIUM, the lowermoſt compoſed of three lanceolate leaves, the uppermoſt divided into five ſegments, ovate and pointed, often jagged, dotted, hirſute, the edge ſerrated with ſmall glands. *fig.* 1.
COROLLA: PETALA quinque, ſubtriangularia, carnea, venis ſaturatioribus ramoſis notata, apice ſubtruncata, eroſa, baſi albida, margine utrinque ciliata. *fig.* 2.	COROLLA: five PETALS, ſomewhat triangular, fleſh-coloured, marked with branched veins of a deeper colour, ſomewhat truncated with a piece bit out at top, at bottom whitiſh, with the edge fringed on each ſide with hairs. *fig.* 2.
STAMINA: FILAMENTA plurima, in tubum cylindraceum, albidum, piloſum coalita, ſuperne libera, reflexa. ANTHERÆ primum reniformes, carneæ, dein purpureæ, demum cæruleſcentes. POLLEN album, globoſum. *fig.* 3.	STAMINA: FILAMENTS numerous, forming a whitiſh hairy cylindrical tube, looſe at top, and bending back. ANTHERÆ at firſt kidney-ſhaped and fleſh-coloured, then purple, and laſtly blueiſh. POLLEN white and globular. *fig.* 3.
PISTILLUM: GERMINA plurima, in orbem diſpoſita, flaveſcentia; STYLI plurimi, ruberrimi, filiformes, ad unum latus piloſi, polline plerumque obducti. STIGMATA ſimplicia. *fig.* 5.	PISTILLUM: GERMINA numerous, circularly diſpoſed, of a yellowiſh colour. STYLES numerous, of a bright red colour, thread-ſhaped, hairy on one ſide, and generally covered with pollen. STIGMATA ſimple. *fig.* 5.

The plant here figured has been, and is ſtill, conſidered by moſt Engliſh Botaniſts as the *Vervain Mallow:* there is little doubt but it is the plant which RAY conſidered as the *Alcea vulgaris major* of C. BAUHINE, in which idea he was moſt probably miſtaken, as it accords better with the *Alcea rotundifolia laciniata* of that author. Be this as it may, it certainly is not the *Malva Alcea* of LINNÆUS, which Mr. HUDSON makes a native of this country; and which, he ſays, grows wild in *Warwickſhire*, *Leiceſterſhire*, and *Nottinghamſhire*.

At the ſame time that LINNÆUS has very properly made two diſtinct ſpecies of theſe plants, he has been rather unfortunate in the parts he has ſelected for their diſcrimination.

Taking for granted that Mr. HUDSON has good authority for what he aſſerts (although the counties he ſpecifies are not particularly mentioned by RAY) it appears, that the *Moſchata* is a general, the *Alcea* a local plant; the former I have found in moſt of the counties I have viſited, and Mr. LIGHTFOOT mentions it as growing in Scotland; the latter I have never ſeen wild, but have occaſionally obſerved it in ſome of the gardens about London; and laſt year, having an opportunity of cultivating it in my own, I was agreeably ſurprized, to find that it afforded many obvious and ſatisfactory diſtinctions, the moſt ſtriking of which I ſhall enumerate, for the gratification of the Engliſh Botaniſt.

The *Malva Alcea* grew to nearly twice the height of the *Moſchata*, whence it agrees with BAUHINE's name of *major*. It was in every reſpect a ſtronger plant, and harſher to the touch; the leaves of the ſtalk were much leſs jagged; the flowers in both were pretty ſimilar, both in ſhape, ſize, and colour; but the calyces differed remarkably. In the *Moſchata* the lowermoſt ſet of leaves were lanceolate, ſometimes almoſt linear; in the *Alcea* they were ovate; added to this, the calyx of the *Alcea*, near its baſe, had a large protuberant annulus or ring, which was entirely wanting in the *Moſchata*. Theſe characters of the calyx alone will, it is preſumed, ever be found ſufficient to diſtinguiſh the two plants when in flower; beſides theſe, the *Moſchata* drawn through the hand has the peculiar property of communicating a ſtrong ſmell of muſk, whence its name.

From this relation thoſe Botaniſts, reſident in the counties above mentioned, will be better enabled to judge whether they have the true *Malva Alcea* or not.

The *Moſchata* grows very plentifully in the neighbourhood of *Coomb Wood*, and flowers in *June* and *July*.

No particular virtues or uſes are attributed to this ſpecies; but its beauty entitles it to a place in the garden.

Bees reſort much to it.

Molva moschata.

Stachys arvensis.

STACHYS ARVENSIS. CORN STACHYS.

STACHYS *Lin. Gen. Pl.* DIDYNAMIA GYMNOSPERMIA.

Corollæ lab. ſuper. fornicatum, lab. inferius lateribus reflexum: intermedia majore emarginata. *Stamina* deflorata verſus latera reflexa.

Raii Syn. Gen. 14. SUFFRUTICES ET HERBÆ VERTICILLATÆ.

STACHYS *arvenſis* verticillis ſexfloris, foliis obtuſis nudiuſculis, corollis longitudine calycis, caule debili. *Lin. Syſt. Vegetab.* p. 448. *Sp. Pl.* p. 814.

GLECOMA *arvenſis*. *Lin. Fl. Suec.* n. 512. *Hudſon Fl. Angl.* ed. 1. p. 224. upright Ground-ivy.

TRIXAGO foliis ovatis, cordatis, rotunde dentatis, hirſutis. *Haller. Hiſt.* n. 231.

SIDERITIS alſines trixaginis folio. *B. Pin.* 233.

SIDERITIS hederulæ folio. *Park.* 587.

SIDERITIS humilis lato obtuſo folio. *Gerard. emac.* 699.

STACHYS arvenſis minima. *Riv. Irr. Mon. icon.* *Raii Syn.* p. 242. *Hudſon Fl. Angl. ed.* 2. p. 260. Corn Stachys. *Lightfoot Fl. Scot. p.* 314. petty Iron-wort or All-heal. *Oeder Fl. Dan. t.* 587.

RADIX annua, fibroſa.

CAULIS ſpithamæus ſeu pedalis, inter ſegetes, ubi nobiſcum ſæpius invenitur, erectus (procumbens ſeu debilis rarius obſervatur) ramoſus, tetragonus, hirſutus. *Rami* alterni, oppoſiti.

FOLIA oppoſita, petiolata, ovato-cordata, obtuſa, venoſa, hirſuta, obtuſe ſerrata, ſumma ſeſſilia.

FLORES parvi, carnei, verticillati, ſpicati.

VERTICILLI circiter ſexflori.

CALYX: PERIANTHIUM quinque-dentatum, perſiſtens, patens, hirſutum. *fig.* 1.

COROLLA ringens, parva, calyce paulo longior, pallide purpurea, labio ſuperiore breviore, obtuſo, integro, inferiore trifido, laciniis lateralibus brevioribus, media majori, rotundata. *fig.* 2.

STAMINA: FILAMENTA quatuor, quorum duo breviora, inferne alba, ſuperne purpurea; ANTHERÆ nigricantes; POLLEN flavum. *fig.* 3.

PISTILLUM: GERMEN quadripartitum, viride. STYLUS longitudine ſtaminum. STIGMA bifidum, acutum. *fig.* 4.

SEMINA quatuor intra calycem, vireſcentia, nigro punctata. *fig.* 5.

ROOT annual and fibrous.

STALK a ſpan or a foot in height, among the corn where it is generally found with us upright, (it is more rarely found weak or procumbent), branched, four cornered, hirſute. *Branches* alternately oppoſite.

LEAVES oppoſite, ſtanding on foot-ſtalks, ovate, with an heart-ſhaped baſe, obtuſe, veiny, hirſute, bluntly ſerrated, the uppermoſt ones ſeſſile.

FLOWERS ſmall, fleſh-coloured, growing in whirls, and forming a ſpike.

WHIRLS containing ſix flowers in each.

CALYX: PERIANTHIUM with five teeth, permanent, projecting horizontally, and hairy. *fig.* 1.

COROLLA ringent, ſmall, a little longer than the calyx, of a pale purple colour, the upper lip ſhort, blunt, and entire; the lower one divided into three ſegments, of which the two ſide ones are the ſhorteſt, the middle one large and roundiſh. *fig.* 2.

STAMINA: four FILAMENTS, two of which are ſhorter than the reſt, white below, and purple above; ANTHERÆ blackiſh; POLLEN yellow. *fig.* 3.

PISTILLUM: GERMEN divided into four parts, of a green colour. STYLE the length of the ſtamina. STIGMA bifid and pointed. *fig.* 4.

SEEDS four within the calyx, of a greeniſh colour, dotted with black. *fig.* 5.

Botaniſts, both ancient and modern, ſeem to have been at a loſs with what genus of plants they ſhould claſs this ſmall inhabitant of our Corn-fields. At various times, and by various authors, it has been called a *Sideritis*, a *Lamium*, a *Marrubiaſtrum*, a *Glechoma*, a *Stachys*, and a *Trixago*. It appears neither to poſſeſs the ſtriking characters of any other genus, nor to afford ſufficient diſtinction to form a genus by itſelf. As a ſpecies, however, there is no difficulty about it; its place of growth, the ſmallneſs of its flowers, and form of its leaves, obviouſly diſtinguiſh it from any other Engliſh plant.

It is not uncommon in the Corn-fields about the *Oak of Honour* and *Coomb* Woods, and elſewhere about London; it flowers in *June*, *July*, and *Auguſt*.

RANUNCULUS HEDERACEUS. IVY-LEAVED CROWFOOT.

RANUNCULUS *Lin. Gen. Pl.* POLYANDRIA POLYGYNIA.

Cal. 5-phyllus. *Petala* 5 intra ungues poro mellifero. *Sem.* nuda.

Raii Syn. Gen. 15. HERBÆ SEMINE NUDO POLYSPERMÆ.

RANUNCULUS *hederaceus* ſoliis ſubrotundis trilobis integerrimis, caule repente. *Lin. Syſt. Vegetab. p.* 431. *Spec. Pl. p.* 781.

RANUNCULUS aquaticus hederaceus luteus. *Bauh. Pin.* 180.

RANUNCULUS hederaceus rivulorum ſe extendens, atra macula notatus. *I. B. III.* 782.

RANUNCULI aquatilis varietas altera. *Ger. emac.* 830.

RANUNCULUS hederaceus aquaticus. *Park.* 1216.

RANUNCULUS aquatilis hederaceus albus. *Raii. Syn. p.* 249. *Hudſon Fl. Angl. p.* 243. *Lightfoot Fl. Scot. p.* 294. *Oeder Fl. Dan. ic.* 219.

RADICES plurimi, ſimplices, albidi, in limum profunde demiſſi.	ROOTS numerous, ſimple, whitiſh, penetrating deeply into the mud.
CAULES plurimi, teretes, ſolidi, geniculati, craſſiuſculi, repentes, late diffuſi.	STALKS numerous, round, ſolid, jointed, thickiſh, creeping, ſpreading wide.
FOLIA petiolata, plerumque quinquelobata, ſubcarnoſa, nitida, avenia.	LEAVES ſtanding on foot-ſtalks, generally divided into five lobes, ſomewhat fleſhy, ſhining, and veinleſs.
PETIOLI ad baſin vaginâ magna, membranacea, inſtructi.	LEAF-STALKS at the baſe furniſhed with a large membranous ſheath.
PEDUNCULI axillares, petiolis breviores, uniflori, primo erecti, peractâ floreſcentiâ verſus terram recurvati.	FLOWER-STALKS proceeding from the alæ of the leaves ſhorter than the leaf-ſtalks, ſupporting one bloſſom, at firſt upright, after the flowering is over, turned back towards the ground.
FLORES parvi, albi.	FLOWERS ſmall and white.
CALYX: PERIANTHIUM pentaphyllum, foliolis ovatis, margine membranaceis, flaveſcentibus, *fig.* 1.	CALYX: a PERIANTHIUM of five leaves, which are ovate, membranous and yellowiſh at the edges, *fig.* 1.
COROLLA: PETALA quinque, alba, oblonga, obtuſiuſcula, calyce longiora, *fig.* 2.	COROLLA: five white PETALS of an oblong ſhape, ſomewhat obtuſe, and larger than the calyx, *fig.* 2.
NECTARIUM: *Porus* nudus prope baſin cujuſvis petali, *fig.* 3.	NECTARY: a naked *Pore* at the baſe of each petal, *fig.* 3.
STAMINA: FILAMENTA quinque ad decem. ANTHERÆ oblongæ, flavæ, *fig.* 4.	STAMINA: FILAMENTS from five to ten. ANTHERÆ oblong and yellow, *fig.* 4.
SEMINA plurima, obtuſa, *fig.* 5. in capitula ſubrotunda, viciæ vulgaris magnitudine fere, denſe ſtipata.	SEEDS numerous, blunt, *fig.* 5. crouded together in roundiſh heads, about the ſize of the common tare.

Neither LINNÆUS, HALLER, nor SCOPOLI, mention this plant in their reſpective Floras. OEDER figures it in the *Flora Danica:* the plant he gives us appears as if it had grown in water of ſome depth; with us it is moſt commonly found ſpreading widely on the mud of ſlow ſhallow rivulets, eſpecially where the ſoil is ſandy.

It flowers during moſt of the ſummer months.

We ſometimes meet with the leaves having a dark ſpot in the middle of each, and in ſome ſituations the bloſſoms are much larger than in others.

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Ranunculus hederaceus.

Chenopodium hybridum.

CHENOPODIUM HYBRIDUM. THORN-APPLE-LEAVED GOOSEFOOT.

CHENOPODIUM *Lin. Gen. Pl.* PENTANDRIA DIGYNIA.

Cal. 5-phyllus, 5-gonus. *Cor.* 0. *Sem.* 1 lenticulare, ſuperum.

Raii Syn. Gen. 5. HERBÆ FLORE IMPERFECTO SEU STAMINEO (VEL APETALO POTIUS).

CHENOPODIUM *Hybridum* foliis cordatis angulato-acuminatis, racemis ramoſis nudis. *Lin. Syſt. Veget. p.* 216. *Sp. Pl. p.* 319. *Fl. Suec. n.* 220.

CHENOPODIUM foliis glabris ſeptangulis, floribus paniculatis. *Haller. Hiſt. n.* 1588.

ATRIPLEX ſylveſtris latifolia, acutiore folio. *Bauh. Pin.* 119.

CHENOPODIUM Stramonii folio. *Vaillant, Paris* 36. *t.* 7. *f.* 2.

CHENOPODIO affinis, folio lato, laciniato, in longiſſimum mucronem procurrente, florum ramulis ſparſis. *Raii Hiſt. III.* 123.

BLITUM Aceris folio. *Pet. H. Brit.* 8. 7.

ATRIPLEX odore et folio Stramonii minori tamen. *Læl. Triumf.* apud fratrem. *Raii Syn. p.* 154. *Hudſon. Fl. Angl. ed.* 2. *p.* 105.

RADIX annua, ſimplex, fibroſa, fibris plurimis, capillaceis, patentibus.	ROOT annual, ſimple, and fibrous, fibres numerous, capillary, and ſpreading.
CAULIS pedalis, ad bipedalem, erectus, ramoſus, angulatus, glaber.	STALK from one to two feet high, upright, branched, angular, and perfectly ſmooth.
FOLIA petiolata, alterna, glabra, ſine farinâ, venoſa, ſubtriangularia, patentia, utrinque plerumque tridentata, acuminata, dentibus magnis, remotis.	LEAVES ſtanding on foot-ſtalks, alternate, ſmooth, without any meal, veiny, ſomewhat triangular, ſpreading, furniſhed with three teeth on each ſide, and running out to a long point, the teeth large, and diſtant from each other.
PETIOLI foliis breviores, ſubrugoſi, inferne convexi, ſuperne canaliculati.	LEAF-STALKS ſhorter than the leaves, ſomewhat wrinkled, convex on the under, and hollow on the upper ſide.
FLORES paniculati.	FLOWERS growing in a panicle.
PANICULA ampla, ramoſiſſima, nuda.	PANICLE large, very much branched, and naked.
CALYX: PERIANTHIUM pentaphyllum, perſiſtens, foliolis ovatis, obtuſiuſculis, pulverulentis, margine membranaceis.	CALYX: PERIANTHIUM of five leaves and permanent, leaves ovate, ſomewhat obtuſe, mealy, membranous at the edge.
COROLLA nulla.	COROLLA wanting.
STAMINA: FILAMENTA quinque, ſubulata, flaveſcentia, longitudine calycis. ANTHERÆ didymæ, ſubrotundæ, flavæ, *fig.* 2.	STAMINA: FILAMENTS five, tapering, yellowiſh, the length of the calyx. ANTHERÆ double, roundiſh, and yellow, *fig.* 2.
PISTILLUM: GERMEN orbiculatum. STYLUS bipartitus, brevis. STIGMATA minima, ſubreflexa, *fig.* 3.	PISTILLUM: GERMEN round, but ſomewhat flattened. STYLE ſhort, bipartite. STIGMATA very ſmall, turned ſomewhat back, *fig.* 3.
SEMEN e nigro caſtaneum, orbiculare, depreſſum, intra calycem.	SEED of a dark cheſnut colour, orbicular, flattened, contained within the calyx.

LINNÆUS, when he beſtowed on this *Chenopodium* the name *Hybridum*, had an idea, as may be learned from his *Flora Suecica* *, that it was a ſpurious plant produced from the *viride:* repeated obſervations would probably have taught him, that this opinion was too haſtily adopted, as the *hybridum* has certainly as great pretenſions to be conſidered as an original ſpecies, as the *viride*, the *album*, or any other. Indeed it is one of thoſe *Chenopodiums* which varies the leaſt of any; and, beſides the form of its leaves, which reſemble thoſe of the Thorn-Apple, and its peculiarly branched and naked panicle of flowers, it has a ſtrong and diſagreeable ſmell, which ſome have compared to that of the Thorn-Apple: Alſo, ſown in the garden, it produces invariably the likeneſs of the original plant.

Of all the *Engliſh* plants of this genus, and we have them all (the maritimum excepted) growing wild about *London*, the environs of which are in many places peculiarly favourable to their growth, this is by far the ſcarceſt. I have hitherto diſcovered it in one place only, and that ſparingly, *viz.* in *Batterſea-Fields*, betwixt the *Windmill-Meadow* and the road leading to *Chelſea-Bridge* adjoining the Gardener's ground. It flowers in *Auguſt*.

It is mentioned, in the third edition of Mr. RAY'S *Synopſis*, to have been found by Mr. SHERARD on the banks of ſome watery pits beyond *Ely*, and by Mr. DALE about *Colcheſter*. Mr. HUDSON deſcribes it as growing plentifully about *North-Fleet;* and Mr. LIGHTFOOT enumerates it among his *Scottiſh* plants.

Some authors ſuſpect it to be poiſonous. TRAGUS, in particular, mentions it as a plant fatal to ſwine.

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* Habet multa communia cum præcedente (viride) ut forte olim ab eodem ortum ſit, quod racemorum ſtructura indicat. *Fl. Suec. n.* 220. *p.* 80.

ASPERULA ODORATA. WOODRUFF.

ASPERULA *Lin. Gen. Pl.* TETRANDRIA MONOGYNIA.

Cor. 1-petala, infundibuliformis. *Semina* 2, globoſa.

Raii Syn. Gen. 12. HERBÆ STELLATÆ.

ASPERULA *odorata* foliis octonis lanceolatis, florum faſciculis pedunculatis. *Lin. Syſt. Vegetab.* p. 125. *Sp. Pl.* p. 150.

ASPERULA caule erecto, foliis octonis; petiolis ramoſis erectis, ſeminibus hirſutis. *Haller. Hiſt.* n. 728.

GALIUM odoratum. *Scopoli Fl. Carn.* n. 158.

ASPERULA ſeu Rubeola montana odora. *Bauh. Pin.* 334.

ASPERULA. *Ger. emac.* 966.

ASPERULA aut Aſpergula odorata. *Parkins.* 563. *Raii Syn.* p. 225. Woodroof or Woodruffe. *Hudſon Fl. Angl. ed.* 2. p. 66. *Lightfoot Fl. Scot.* p. 115. *Oeder Fl. Dan.* t. 562.

RADIX perennis, tenuis, articulatus, flaveſcens, paulo infra terram repens, et plurimas fibrillas dimittens.	ROOT perennial, ſlender, jointed, of a yellowiſh colour, creeping a little below the ſurface of the earth, and ſending down numerous ſmall fibres.
CAULIS erectus, ſpithamæus, plerumque ſimplex, tetragonus, quadriſulcatus, glaber.	STALK upright, about a ſpan in height, for the moſt part perfectly ſimple, four-cornered, with a groove on each ſide, and ſmooth.
FOLIA plerumque octona, verticillata, lanceolata, mucronata, glabra, ſpinulis ciliata. *fig.* 1.	LEAVES growing generally eight together in a whirl, lanceolate, terminating in a ſmall point, ſmooth and edged with ſmall ſpines. *fig.* 1.
CORYMBUS terminalis, nudus, erectus.	CORYMBUS terminal, naked, and upright.
CALYX nullus.	CALYX wanting.
COROLLA monopetala, alba, infundibuliformis. *Tubus* brevis, germini inſidens. *Limbus* quadripartitus, tubo longior, laciniis lanceolatis, patentibus, craſſiuſculis. *fig.* 2.	COROLLA monopetalous, white, funnel-ſhaped. *Tube* ſhort, ſitting on the germen. *Limb* divided into four ſegments, longer than the tube, ſegments lanceolate, ſpreading, thickiſh. *fig.* 2.
STAMINA: FILAMENTA quatuor, ad apicem tubi, breviſſima, alba. ANTHERÆ albidæ, longitudine filamentorum, oblongæ, ſublineares, incumbentes. *fig.* 3.	STAMINA: four FILAMENTS at the top of the tube, very ſhort and white. ANTHERÆ whitiſh, the length of the filaments, oblong, ſomewhat linear and incumbent. *fig.* 3.
PISTILLUM: GERMEN inferum, viride, ſubrotundum, utrinque compreſſum, obſolete didymum, hiſpidum. STYLUS filiformis, albus, bifidus, antheris brevior. STIGMATA duo, globoſa, inæqualia. *fig.* 4, 5, 6.	PISTILLUM: GERMEN placed beneath the corolla, of a green colour, roundiſh, flattened on both ſides, obſcurely double, and hiſpid. STYLE filiform, white, bifid, ſhorter than the antheræ. STIGMATA two, globular and unequal. *fig.* 4, 5, 6.
NECTARIUM: *Glandula* parva baſin ſtyli cingens.	NECTARY: a ſmall *Gland* ſurrounding the baſe of the ſtyle.
PERICARPIUM: *Baccæ* duæ, ſiccæ, globoſæ, coalitæ, hiſpidæ. *fig.* 7.	SEED-VESSEL: two, dry, round, hiſpid berries united together. *fig.* 7.
SEMINA ſolitaria, ſubrotunda, magna. *fig.* 8.	SEEDS ſingle, large and roundiſh. *fig.* 8.

The flowers of *Woodruff* have an agreeable ſmell, and the whole plant, when dried, diffuſes an odour like that of the *ſweet-ſcented Vernal-graſs*. Kept among cloaths, it not only imparts to them an agreeable perfume, but, according to LINNÆUS, preſerves them from inſects.

RAY informs us, that it gives its flavour to vinous liquors; and that the Germans uſe it much for that purpoſe.

As a medicinal plant, it is ſuppoſed to attenuate viſcid humours, and ſtrengthen the tone of the Bowels, whence it is recommended in obſtructions of the liver and biliary ducts, and by ſome in Epilepſies and Palſies: modern practice has nevertheleſs rejected it.

It is common in the woods about *London*, eſpecially *Charlton Wood*; and flowers in *May* and *June*.

Asperula odorata.

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Myosurus minimus.

MYOSURUS MINIMUS. MOUSE-TAIL.

MYOSURUS *Lin. Gen. Pl.* PENTANDRIA POLYGYNIA.

Cal. 5-phyllus, baſi adnatus. *Nectaria* 5 ſubulata, petaliformia. *Sem.* numeroſa.

Raii Syn. Gen. 15. HERBÆ SEMINE NUDO POLYSPERMÆ.

MYOSURUS *minimus.* *Lin. Syſt. Vegetab.* p. 254. *Sp. Pl.* p. 407. *Fl. Suec.* n. 276.

MYOSURUS. *Haller. Hiſt.* n. 1159.

HOLOSTEO adfinis Cauda muris. *Bauh. Pin.* 190.

CAUDA MURINA. *Dod. Pempt.* 112.

RANUNCULUS gramineo folio, flore caudato, ſeminibus in capitulum ſpicatum congeſtis. *Tournefort Inſt.* 293.

MYOSUROS. *Dillen. Nov. Gen.* p. 108. t. 4.

HOLOSTEUM Loniceri, Cauda muris vocatum. *Park.* 500.

CAUDA MURIS. *Gerard. emac.* 426. *Raii Syn.* 251. Mouſe-tail. *Lightfoot Fl. Scot.* p. 179. *Hudſon Fl. Angl.* ed. 2. p. 136.

RADIX annua, fibroſa.

FOLIA, omnia radicalia, viginti circiter in plantâ mediæ magnitudinis, erecta, longitudine inæquali, linearia, ſuperne latiora, compreſſa, utrinque obſolete canaliculata, glabra, ſubcarnoſa, obtuſa, e flavo-viridia, baſi rubicunda.

SCAPI quatuor, quinque, aut plures, uniflori, erecti, bipollicares et ultra, foliis longiores, teretes, ſuperne paulo craſſiores, glabri.

CALYX: PERIANTHIUM pentaphyllum, foliolis oblongis, obtuſis, concavis, herbaceis, patentibus. *Unguibus* poſtice elongatis, appreſſis, acuminatis. *fig.* 1, 2.

COROLLA: PETALA quinque, calyce breviora, minutiſſima, flaveſcentia, unguiculata, limbo patente, baſi ſubtubuloſa. *fig.* 3. auct. 5.

STAMINA: FILAMENTA quinque, vel plura, longitudine fere calycis, receptaculo inſerta, filiformia, alba, erecta. ANTHERÆ oblongæ, luteſcentes. *fig.* 4.

PISTILLUM: GERMINA numeroſa, receptaculo in formam conico-oblongam inſidentia. STYLI nulli. STIGMATA minima, ſimplicia. *fig.* 6.

PERICARPIUM nullum. *Receptaculum* longiſſimum, ſtyliforme, ſeminibus imbricatim diſpoſitis tectum. *fig.* 7.

SEMINA numeroſa, compreſſa, mucronata. *fig.* 8, 9.

ROOT annual and fibrous.

LEAVES, all of them radical, about twenty in a plant of a middling ſize, upright, of unequal length, linear, broadeſt at top, and flattened, faintly channeled on each ſide, ſmooth, ſomewhat fleſhy, blunt, of a yellowiſh green colour, and reddiſh at the baſe.

FLOWERING-STEMS four, five, or more, each ſupporting one flower, upright, two inches or more in length, longer than the leaves, round, ſmooth, and a little thickeſt at the top.

CALYX: a PERIANTHIUM of five leaves, the leaves oblong, obtuſe, hollow, herbaceous, ſpreading. *Claws* lengthened out behind, preſſed to the flowering ſtem, and tapering to a point. *fig.* 1, 2.

COROLLA: five PETALS, ſhorter than the calyx, very minute, of a yellowiſh colour, clawed, the limb ſpreading, ſomewhat tubular at its baſe. *fig.* 3. magn. 5.

STAMINA: FILAMENTS five or more, almoſt the length of the calyx, fixed to the receptacle, thread-ſhaped, white, upright. ANTHERÆ oblong and yellowiſh. *fig.* 4.

PISTILLUM: GERMINA numerous, ſitting on a receptacle, of an oblong, conic ſhape. STYLES none. STIGMATA very ſmall and ſimple. *fig.* 6.

SEED-VESSEL none. *Receptacle* very long, ſtyle-ſhaped, covered with ſeeds, laying one over another. *fig.* 7.

SEEDS numerous, flat, and pointed. *fig.* 8, 9.

Some of the early Botaniſts gave to this plant the name of *Mouſe-tail*, more from the general appearance of the plant than any particular attention to generic character. TOURNEFORT afterwards arranged it with the *Ranunculi*, DILLENIUS, not ſatisfied with ſuch arrangement, made a diſtinct genus of it; which has been adopted by LINNÆUS.

The ſtructure of the whole fructification is ſingular, and deſerving the attention of the young Botaniſt; in particular, he ſhould be careful to diſtinguiſh the Corolla from the Stamina.

This delicate little annual grows in corn and clover-fields, and by path-ſides, eſpecially where water has been apt to ſtagnate. It is found about *Iſlington*, *Paddington*, and *Pancraſs*; but with more certainty in the fields about *Dulwich*, eſpecially on the right-hand-ſide of *Lordſhip-lane*, near *Dulwich Wood*.

It flowers in *May* and *June*, and ripens it ſeed in *July* and *Auguſt*.

MILIUM EFFUSUM. MILLET GRASS.

MILIUM *Lin. Gen. Pl.* TRIANDRIA DIGYNIA.

Cal. 2-valvis, uniflorus: valvulis ſubæqualibus. *Corolla* breviſſima. *Stigmata* penicilliformia.

Raii Syn. Gen. 27. HERBÆ GRAMINIFOLIÆ FLORE IMPERFECTO CULMIFERÆ.

MILIUM *effuſum* floribus paniculatis diſperſis muticis. *Lin. Syſt. Veget.* p. 94. *Sp. Pl.* p. 90. *Fl. Suec.* n. 61.

MILIUM paniculis raris, longiſſime petiolatis. *Haller. Hiſt.* 1525.

GRAMEN ſylvaticum, panicula miliacea ſparſa. *Bauh. Pin.* 8.

GRAMEN miliaceum. *Lob. icon.* 3. *Ger. emac.* 6. *I. B. II.* 462.

GRAMEN miliaceum vulgare. *Park.* 1153. *Raii Syn.* p. 402. Millet-graſs. *Lightfoot Fl. Scot.* p. 92.

RADIX perennis, repens.	ROOT perennial, and creeping.
CULMI tenues, tres, quatuorve pedes alti, quatuor communiter geniculis diſtincti, totidemque, vel quinis foliis a geniculis oriundis, veſtiti.	STALKS ſlender, three or four feet high, commonly furniſhed with four joints, and cloathed with as many or five leaves, ariſing from the joints.
FOLIA palmaria, ſpithamæa, et pedalia, glabra, tenuia, et infirma, ſubtiliſſimè per longitudinem ſtriata, ſupernâ et infernâ parte aſpera, marginibus etiam, ſi deorſum ſtringantur, aſperis donata, tres, quatuorve lineas lata, ſenſim in acutum mucronem terminata. *Vaginæ* ſtriatæ, glabræ, ad internam foliorum baſin in membranulam tenuem, plerumque laciniatam terminatæ.	LEAVES from four to ſeven inches or a foot in length, ſmooth, thin and weak, very finely ſtriated through their whole length, the upper and under ſide as well as the edges rough if drawn backward through the hand, three or four lines in breadth, terminating gradually in a fine point. *Sheath* ſtriated, ſmooth, at the inner baſe of the leaf terminating in a membrane which is often jagged.
PANICULA palmaris, frequentius tamen ſpithamæa, pedalis et longior quandoque, ſuberecta, diffuſa, laxa.	PANICLE four inches in length, but more frequently a ſpan, a foot, or more, nearly upright, ſpreading and looſe.
RAMI paniculæ, capillares, flexuoſi.	BRANCHES of the panicle very fine, and crooked.
CALYX: *Gluma* uniflora, bivalvis, acuminata, valvulis æqualibus, lævibus, ovatis, acutis. *fig.* 1. 2.	CALYX: a *Glume* of one flower, and two valves, pointed, the valves equal, ſmooth, ovate, and pointed. *fig.* 1. 2.
COROLLA bivalvis, calyce minor: valvulæ ovatæ, obtuſiuſculæ, altera minore. *fig.* 3. 4.	COROLLA compoſed of two valves, ſmaller than the calyx: the valves ovate, bluntiſh, one ſmaller than the other. *fig.* 3. 4.
STAMINA: FILAMENTA tria, capillaria, corollâ longiora. ANTHERÆ primo oblongæ, demum bifurcæ, flavæ. *fig.* 5.	STAMINA: three FILAMENTS, very fine, longer than the corolla. ANTHERÆ firſt oblong, then forked at each end, of a yellow colour. *fig.* 5.
PISTILLUM: GERMEN ſubrotundum, viride, glabrum; STYLI duo reflexi, plumoſi, albi. *fig.* 6.	PISTILLUM: GERMEN roundiſh, green, ſmooth. STYLES two, turned back, feathered and white. *fig.* 6.
SEMEN unicum, tectum, ſubrotundum, nitidum. *fig.* 7.	SEED ſingle, encloſed, roundiſh, and ſhining. *fig.* 7.

The graſs here figured is the only one we have of the genus *Milium.* It is diſtinguiſhed from the *Panics,* to which it has the greateſt natural affinity, by having a calyx of two valves only: the height it uſually attains, the particular ſituation in which it is found, joined to the delicacy of its panicle, eminently diſtinguiſh it from all our other graſſes.

It abounds in many of the woods about town, particularly in *Charlton Wood,* and flowers in *May* with the Lily of the Valley and Hare-bell.

It has a creeping root, and grows readily in a ſhady ſituation.

Milium effusum.

Plantago media

PLANTAGO MEDIA. HOARY PLANTAIN.

PLANTAGO *Lin. Gen. Pl.* TETRANDRIA MONOGYNIA.

Cal. 4-fidus. *Cor.* 4-fida: limbo reflexo. *Stamina* longiſſima. *Capſ* 2-locularis, circumſciſſa.

Raii Syn. Gen. 22. HERBÆ VASCULIFERÆ FLORE TETRAPETALO ANOMALÆ.

PLANTAGO *media* foliis ovato-lanceolatis pubeſcentibus, ſpica cylindrica, ſcapo tereti. *Lin. Syſt. Vegetab.* p. 131. *Sp. Pl.* p. 163. *Fl. Suec.* n. 130.

PLANTAGO foliis ſubhirſutis, ellipticis, ſpica cylindrica denſa. *Haller. Hiſt.* n. 659.

PLANTAGO *media. Scopoli Fl. Carniol.* 162.

PLANTAGO latifolia incana. *Bauhin. Pin.* 189.

PLANTAGO major incana. *Parkins.* 493.

PLANTAGO incana. *Ger. emac.* 419. *Raii Syn.* p. 314. Hoary Plantain, or Lamb's Tongue, *Hudſon Fl. Angl. ed.* 2. p. 63. *Lightfoot Fl. Scot.* p. 117.

RADIX perennis, craſſitie digiti aut pollicis, ſubconica, apice in crura aliquot diviſa, extus nigricans, plurimis fibrillis inſtructa.	ROOT perennial, the thickneſs of one's finger or thumb, ſomewhat conic, dividing at the top into a few branches, externally of a blackiſh colour, and furniſhed with numerous fibres.
FOLIA ovata, breviſſime petiolata, ſupra terram expanſa, interioribus ſenſim minoribus, quinquenervia, ſubrugoſa, utrinque pubeſcentia, integerrima.	LEAVES ovate, ſtanding on very ſhort foot-ſtalks, expanded on the ground, the innermoſt gradually ſmalleſt, having five ribs, ſomewhat wrinkly, downy on both ſides, and entire at the edges.
SCAPI plures, teretes, infra folia prodeuntes, ſpithamæi, aut pedales, erecti, pubeſcentes, pube ſuperne erecta, adpreſſa.	FLOWERING-STEMS ſeveral, round, proceeding from below the leaves, from ſeven inches to a foot in height, upright, downy, the hairs on the upper part of it upright, and preſſed to the ſtalk.
SPICÆ florum cylindricæ, pollicares aut palmares.	SPIKES of the flowers cylindrical, from one to four inches in length.
BRACTEA, ſeu ſquamula lanceolata, concava, margine membranacea, ſingulo floſculo ſubjicitur, longitudine calycis.	FLORAL-LEAF, a floral-leaf or lanceolate ſmall hollow ſcale, membranous at the edge, and of the length of the calyx, is placed under each floret.
CALYX: PERIANTHIUM quadripartitum, erectum, perſiſtens; laciniis ovatis, acutiuſculis, membranaceis, nervo viridi inſignitis. *fig.* 1.	CALYX: a PERIANTHIUM deeply divided into four ſegments, erect and permanent; the ſegments ovate, a little pointed, membranous, and marked with a green rib. *fig.* 1.
COROLLA monopetala, perſiſtens, tabeſcens. *Tubus* cylindraceus, baſi globoſus. *Limbus* quadripartitus, depreſſus, laciniis ovatis, acutis. *fig.* 2.	COROLLA monopetalous, permanent, withered. *Tube* cylindrical, with a globular baſe. *Limb* divided into four ſegments, which are preſſed downwards, ovate and pointed. *fig.* 2.
STAMINA: FILAMENTA quatuor, capillaria, erecto-patentia, calyce triplo longiora, purpuraſcentia. ANTHERÆ albæ, incumbentes, una extremitate bifidâ, altera mucronatâ. *fig.* 3.	STAMINA: four FILAMENTS very ſlender, ſomewhat ſpreading, thrice the length of the calyx, of a a purpliſh colour. ANTHERÆ white, laying acroſs the filaments, one end bifid, the other pointed. *fig.* 3.
PISTILLUM: GERMEN ovatum. STYLUS filiformis, piloſus, ſtaminibus brevior. STIGMA ſimplex. *fig.* 4.	PISTILLUM: GERMEN ovate. STYLE thread-ſhaped, hairy, ſhorter than the ſtamina. STIGMA ſimple. *fig.* 4.
PERICARPIUM: CAPSULA ovalis, circumſciſſa, diſperma. *fig.* 6.	SEED-VESSEL: an oval CAPSULE, dividing horizontally in the middle, and containing two ſeeds. *fig.* 6.
SEMINA bina, hinc convexa, inde plano concava. *fig.* 7.	SEEDS two together, convex on one ſide, and plano-concave on the other. *fig.* 7.

This ſpecies of Plantain has a large root when fully grown, which penetrates deep into the earth, and being ſupplied with numerous lateral fibres, it ſupports itſelf in the moſt ſcorching ſeaſons, when the plants around it are frequently burnt up. It is alſo one of thoſe plants which are not deſtroyed by repeated mowing, as moſt lawns and graſs plats ſufficiently teſtify.

It may be diſtinguiſhed from the common Plantain by the leaves being ſmaller, and hoary, ſtanding on ſhorter foot-ſtalks, lying cloſe to the ground, and having no notches on the edges; by its ſpikes being ſhorter, its filaments longer, its antheræ whiter and more ſhowy, and, if any other difference were wanting, we might add, that its capſules, inſtead of many, contain only two ſeeds, as in the *lanceolata*.

About *London* it is not ſo common as either the *lanceolata* or *major*; but where the ſoil is chalky no plant occurs more frequently. It flowers from *June* to *Auguſt*.

Sheep, Goats, and Swine, eat it; Kine and Horſes refuſe it. *Lin. Pan. Suec.*

GERANIUM PRATENSE. CROWFOOT CRANESBILL.

GERANIUM *Lin. Gen. Pl.* MONADELPHIA DECANDRIA.
Monogyna. *Stigmat.* 5. *Fructus* roſtratus, 5-coccus.

Raii Syn. Gen. 24. HERBÆ PENTAPETALÆ VASCULIFERÆ.

GERANIUM *pratenſe* pedunculis bifloris, foliis ſubpeltatis multipartitis rugoſis acutis, petalis integris. *Lin. Syſt. Veget.* p. 514. *Sp. Pl.* p. 954. *Fl. Suec.* n. 968.

GERANIUM caule erecto, foliis rugoſis hirſutis multilobis, lobis trifidis, lobulis ſemipinnatis, floribus umbellatis. *Haller. Hiſt.* n. 931.

GERANIUM *pratenſe Scopoli Fl. Carn.* n. 852.

GERANIUM batrachoides, Gratia Dei Germanorum. *Bauh. Pin.* 318.

GERANIUM Batrachoides. *Ger. emac.* 922.

GERANIUM Batrachoides flore cæruleo. *Park.* 704. *Raii Syn.* ed. 3. p. 360. Crowfoot Craneſbill. *Hudſon Fl. Angl.* ed. 2. p. 302. *Lightfoot Fl. Scot.* p. 368.

RADIX perennis, craſſitie digiti minimi aut major, horizontalis, rugoſa, e rubro fuſca, intus flaveſcens, fibris majuſculis profunde penetrantibus inſtructa.	ROOT perennial, the thickneſs of the little finger, or larger, horizontal, wrinkled, of a reddiſh brown colour, yellowiſh within, furniſhed with largiſh fibres, which penetrate to a great depth.
CAULIS pedalis ad tripedalem, erectus, ramoſus, teretiuſculus, pubeſcens, baſi ruberrimus, ſubanguloſus.	STALK from one to three feet in height, upright, branched, roundiſh, downy, very red, and ſomewhat angular at the bottom.
FOLIA hirſutula, radicalia longiſſime petiolata, ſuprema ſubſeſſilia, omnibus multipartitis, venoſis, ſubtus pallidioribus, laciniis multifidis, inciſis.	LEAVES ſomewhat hirſute, thoſe next the root, ſtanding on very long footſtalks, the uppermoſt ones nearly ſeſſile, all of them deeply divided into many ſegments, veiny and paler underneath, the ſegments jagged.
PETIOLI teretes, pubeſcentes.	LEAF-STALKS round and downy.
STIPULÆ ad baſin foliorum utrinque binæ, ovato acuminatæ, primo rubicundæ, dein marceſcentes, ad baſin pedunculorum quinæ, lanceolatæ.	STIPULÆ at the baſe of the leaves two on each ſide, ovate and pointed, at firſt reddiſh, afterwards withering, thoſe at the baſe of the peduncles five in number, and lanceolate.
PEDUNCULI gemini, piloſiſſimi, viſcoſi, primo nutantes, demum erecti.	FLOWER-STALKS growing two together, very hairy, clammy, at firſt drooping, laſtly upright.
FLORES magni, ſpecioſi, e purpureo cærulei.	FLOWERS large, ſhowy, of a purpliſh blue colour.
CALYX: PERIANTHIUM pentaphyllum, perſiſtens, foliolis ovatis, acutis, concavis, margine membranaceis. *fig.* 1.	CALYX: a PERIANTHIUM of five leaves and permanent, the leaves ovate, pointed, concave, bearded, clammy, ribbed and membranous at the edge. *fig.* 1.
COROLLA: PETALA quinque, ſubintegerrima, venoſa, baſi utrinque hirſutula. *fig.* 2.	COROLLA: five PETALS, nearly entire, veiny, hairy on each ſide the baſe. *fig.* 2.
STAMINA: FILAMENTA decem ſubulata, ſuperne purpuraſcentia, inferne lata, albida; ANTHERÆ oblongæ, cæruleæ, incumbentes. *fig.* 3.	STAMINA: ten FILAMENTS, tapering, purpliſh above, below broad and whitiſh; ANTHERÆ oblong, blue and incumbent. *fig.* 3.
PISTILLUM: GERMEN pentagonum, viſcoſum, viride; STYLUS filiformis, rubicundus, ſtaminibus longior; STIGMA quinquefidum, laciniis linearibus, reflexis. *fig.* 4.	PISTILLUM: GERMEN pentagonal, clammy, of a green colour; STYLE filiform, reddiſh, longer than the ſtamina; STIGMA divided into five ſegments, which are linear and turned back. *fig.* 4.
SEMEN oblongum, læve, ex arillo elaſtice diſſiliens. *fig.* 5, 6.	SEED oblong, ſmooth, thrown from the ſeed-covering with conſiderable elaſticity. *fig.* 5, 6.

This is by far the moſt ſhowy of the Craneſbills growing wild with us, and in that reſpect is exceeded by none of the Engliſh ones except the *Sanguineum.* Its leaves are large, and ſomewhat like thoſe of the Meadow Crowfoots, whence its name.

Its beauty has long ſince recommended it to the notice of the curious in flowers, in the gardens of which we find it not only as it commonly occurs, but alſo with white, purple, and ſtriped bloſſoms.

It loves a moiſt ſituation, as it naturally grows wild in meadows, which it ornaments with its bloſſoms in July and Auguſt. Near London it is found in tolerable abundance in the meadows about Batterſea, and in the vicinity of the *Thames* both above and below bridge; in many parts of *Yorkſhire*, particularly about *Settle*, it is almoſt as common as the Mallow is with us, not only in meadows, but every where under their ſtone walls.

The bloſſoms are much reſorted to by various ſpecies of flies, particularly thoſe of the Genus *Empis.*

Geranium pratense.

Cynoglossum officinale.

CYNOGLOSSUM OFFICINALE. HOUNDSTONGUE.

CYNOGLOSSUM *Lin. Gen. Pl.* PENTANDRIA MONOGYNIA.

Cor. infundibuliformis, fauce clauſa fornicibus. *Stamina* depreſſa interiore tantum latere ſtylo affixa.

Raii Syn. Gen. 13. HERBÆ ASPERIFOLIÆ.

CYNOGLOSSUM *officinale* ſtaminibus corolla brevioribus, foliis lato lanceolatis tomentoſis ſeſſilibus. *Lin. Syſt. Vegetab.* p. 157. *Sp. Pl.* p. 192. *Fl. Suec.* n. 58.

CYNOGLOSSUM foliis ellipticis, lanceolatis, ſericeis, caule folioſo. *Haller. Hiſt.* n. 587.

CYNOGLOSSUM officinale. *Scopoli Fl. Carniol.* 191.

CYNOGLOSSUM majus vulgare. *Bauhin. Pin.* 257. *Ger. emac.* 804. *Parkins.* 511. Great Houndſtongue. *Raii Syn. ed.* 3. p. 226. *Hudſon Fl. Angl. ed.* 2. p. 80. *Lightfoot Fl. Scot.* p. 133.

RADIX biennis, craſſitie digiti ſeu pollicis, pedalis et ultra, fuſiformis, foris nigricans, intus albida.	ROOT biennial, the thickneſs of the finger or thumb, a foot or more in length, tapering, blackiſh on the outſide, and whitiſh within.
CAULIS bi ſeu tripedalis, erectus, ſulcato-angulatus, villoſus, folioſiſſimus, ſuperne ramoſus; *Rami* plurimi, ſuberecti, villoſi.	STALK two or three feet in height, upright, grooved or angular, villous, very leafy, branched at top; *Branches* numerous, nearly upright and villous.
FOLIA radicalia magna, pedalia et ultra, petiolata, ovata, acuta, ſericea hirſutie incana, venoſa, caulina, ſaltem ſuperiora ſeſſilia, conferta, ſparſa, erecta, lanceolata, baſi latiora.	LEAVES proceeding from the root large, a foot or more in length, ſtanding on footſtalks, ovate, pointed, covered with a ſilky down which gives them a greyiſh colour, veiny, thoſe of the ſtalk at leaſt the uppermoſt ones ſeſſile, numerous, placed irregularly on the ſtalk, upright, lanceolate, and broadeſt at the baſe.
FLORES primo ſordide rubentes, demum cæruleſcentes, racemoſi, ſecundi.	FLOWERS at firſt of a dull red colour, afterwards becoming blueiſh, growing in racemi or long bunches, and hanging all one way.
	RACEMI nearly upright, and generally naked.
PEDUNCULI teretes, alterni, pubeſcentes.	FLOWER-STALKS round, alternate, and downy.
CALYX: PERIANTHIUM quinquepartitum, foliolis ovato-lanceolatis, erectis, pubeſcentibus, obtuſiuſculis, interne nitidis. *fig.* 1.	CALYX: PERIANTHIUM deeply divided into five ſegments, the leaves ovato-lanceolate, upright, downy, bluntiſh, ſhining on the inſide. *fig.* 1.
COROLLA: monopetala, infundibuliformis; *Tubus* cylindraceus, craſſus, pallidus, calyce duplo brevior; *Limbus* concavus, quinquefidus, laciniis rotundatis. *fig.* 2, 3.	COROLLA monopetalous, funnel-ſhaped, *Tube* cylindrical, thick, of a pale colour, half the length of the calyx. LIMB concave, divided into five roundiſh ſegments. *fig.* 2, 3.
NECTARIUM: *Squamæ* quinque, purpureæ, antice concaviuſculæ, vertice gibbæ, obtuſæ, margini tubi inſertæ, limbo duplo breviores, conniventes. *fig.* 4. *Faux* corollæ perforata.	NECTARY: five purple *Scales*, anteriorly hollow, gibbous at top, blunt, inſerted into the edge of the tube, half the length of the limb, cloſing together. *fig.* 4. *Mouth* of the corolla perforated.
STAMINA: FILAMENTA quinque, breviſſima; ANTHERÆ oblongæ, virides, ſub ſquamis nectareis reconditæ. *fig.* 5.	STAMINA: five FILAMENTS, very ſhort. ANTHERÆ oblong, green, hid under the ſcaly nectaries. *fig.* 5.
PISTILLUM: GERMINA quatuor, e luteo-vireſcentia, glabra; STYLUS ſubulatus longitudine ſtaminum, perſiſtens; STIGMA obtuſum, emarginatum. *fig.* 6.	PISTILLUM: GERMINA four, of a yellowiſh green colour, ſmooth. STYLE tapering, the length of the ſtamina, permanent. STIGMA blunt and nicked. *fig.* 6.
PERICARPIUM: CAPSULA quatuor depreſſæ, ſubrotundæ, ſcabræ, non dehiſcentes, apice affixæ. *fig.* 7.	SEED-VESSEL: four flat CAPSULES of a roundiſh ſhape, ſomewhat prickly, not opening, fixed by their points. *fig.* 7.
SEMINA ſolitaria, ſubovata, gibba, acuminata, glabra. *fig.* 8.	SEEDS ſingle, ſomewhat ovate, gibbous, pointed and ſmooth. *fig.* 8.

The leaves of this plant are in ſhape thought to reſemble a Dog's-tongue, whence its name.

It grows wild by road ſides, and in uncultivated places; and is particularly common about *Charlton*, and in the road to *Lewiſham*.

It flowers in *June* and *July*, and ripens its ſeeds in *Auguſt* and *September*.

The whole plant has a diſagreeable ſmell, much reſembling that of mice. Its effects are ſaid to be narcotic; and an inſtance is related in the *Hiſt. Oxon.* 3. 450*, in which the leaves boiled by miſtake for thoſe of Comfrey, diſordered a whole family, and proved fatal to one. BARON HALLER quotes Dr. BLAIR as deſcribing a caſe ſomewhat ſimilar; but in that inſtance the plant uſed was not the *Cynogloſſum*, but the *Pulmonaria maritima* †; a plant one would not ſuſpect of being poiſonous.

Houndſtongue has been uſed in medicine both internally and externally; but the preſent practice takes no notice of it in any intention.

Cattle in general diſlike it; but the Goat, who with impunity will eat Deadly Nightſhade and Tobacco, is ſaid ſometimes to crop this nauſeous plant; it is the natural food of the caterpillar of the ſcarlet tyger-moth (*Phalæna Dommula*) which may be found on it in April and May.

The *Cynogloſſum minus folio virente Ger. emac.* 805, is conſidered by LINNÆUS merely as a variety of this plant, and deſcribed by RAY as growing in the *London* road between *Kelvedon* and *Witham* in *Eſſex*, but more plentifully about *Braxſted* by the way ſides. It has alſo been obſerved in ſome ſhady lanes about *Worceſter* by Mr. *Pitts*; at *Southend*, by *Eltham*, plentifully, Mr. *J. Sherard*; by the road ſide, about a mile beyond *Waltham-abbey*, towards *Harlow*, Mr. *Newton*; At *Norbury* in *Surrey*, a mile from *Leatherhead*, plentifully. *Merr. Pin.*

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* "Mulier quædam Oxonienſis, et maritus cum liberis, et quotquot erant iſtius familiæ, folia Cynogloſſi (pro tenellis Symphyti foliis collecta) cocta, "libere comedebant; et prandio mox omnes ægrè ſe habebant, et non multo poſt vomitus moleſtus inſequebatur, deinde ſtupore et ſomno correpti "ſunt, nec poſt horas fere 40 penitus excitati; unus autem mortuus eſt."

† Blair's Miſcellaneous Obſervations, p. 55.

SPERGULA NODOSA. KNOTTED SPURREY.

SPERGULA *Lin. Gen. Pl.* DECANDRIA PENTAGYNIA.

Cal. 5-phyllus. *Petala* 5 integra. *Capſ.* ovata, 1-locularis, 5-valvis.

Raii Syn. Gen. 24. HERBÆ PENTAPETALÆ VASCULIFERÆ.

SPERGULA *nodoſa* foliis oppoſitis ſubulatis lævibus caulibus ſimplicibus. *Lin. Syſt. Vegetab.* p. 363. *Sp. Pl.* p. 630.

ALSINE foliis ſuperioribus faſciculatis. *Haller. Hiſt.* n. 871.

STELLARIA *nodoſa*. *Scopoli Fl. Carn.* n. 545.

ALSINE nodoſa Germanica. *Bauh. Pin.* p. 251.

ALSINE paluſtris, ericæ folio, polygonoides, articulis crebrioribus, flore albo pulchello. *Pluk. alm.* 23. *t.* 7. *fig.* 4.

SAXIFRAGA paluſtris Anglica. *Park.* 427.
ALSINE paluſtris foliis tenuiſſimis, ſeu Saxifraga paluſtris Anglica. *Ger. emac.* 567. 568. *Raii Syn.* p. 350. Engliſh Marſh-Saxifrage. *Hudſon Fl. Angl. ed.* 2. p. 203. *Lightfoot Fl. Scot.* p. 244.

RADIX perennis, fibroſa.	ROOT perennial and fibrous.
CAULES ex una radice plures, palmares et ultra, nunc procumbentes, nunc aſcendentes, poſt floreſcentiam ſæpe repentes, ſimplices ſeu ramoſi, teretes, tenues, glabri, parce piloſi, pilis ad lentem globuliferis, crebris geniculis intercepti, geniculis tumidis.	STALKS ſeveral from one root, four inches or more in length, ſometimes procumbent, ſometimes nearly upright, after flowering often creeping, ſimple or branched, round, ſlender, ſmooth, ſparingly haired, the hairs appearing globular at top when magnified, having numerous joints which are ſwelled.
FOLIA *radicalia* plurima, cæſpitoſa, læte virentia, linearia, acuta, uncialia, ſubcarnoſa, glabra, caulina inferiora paulo breviora, connata, ſuperiora breviſſima, teretiuſcula, faſciculata, ex alis prolifera.	LEAVES next the root numerous, forming a turf, of a beautiful dark green colour, linear, pointed, about an inch in length, ſomewhat fleſhy, ſmooth, the lowermoſt ſtalk-leaves a little longer than the radical ones, joined together at bottom, the uppermoſt ſtalk-leaves very ſhort, from their alæ producing ſmall tufts of leaves, the rudiments of branches.
FLORES albi, delicatuli, in ſummis caulibus et ramulis, majores quam pro plantulæ modo.	FLOWERS white, and delicate, ſitting on the tops of the ſtalks and branches, large in proportion to the ſize of the plant.
PEDUNCULI erecti, ſemipollicares.	FLOWER-STALKS upright, about half an inch in length.
CALYX: PERIANTHIUM pentaphyllum, foliolis oblongis, concavis, ſubpiloſis, pilis ut in caule. *fig.* 1.	CALYX: PERIANTHIUM compoſed of five leaves, which are oblong, hollow, ſlightly hairy, the hairs like thoſe on the ſtalk. *fig.* 1.
COROLLA: PETALA quinque, alba, calyce duplo longiora, ovato-rotundata, integerrima. *fig.* 2.	COROLLA compoſed of five white petals, twice the length of the calyx, of a roundiſh egg-ſhape, perfectly entire. *fig.* 2.
STAMINA: FILAMENTA decem, ſubulata, alba, corollâ breviora. ANTHERÆ concolores, incumbentes, primo bilobæ, lobis oblongis, parallelis. *fig.* 3.	STAMINA: ten FILAMENTS tapering, white, ſhorter than the corolla. ANTHERÆ of the ſame colour, lying acroſs the filament, at firſt compoſed of two oblong lobes parallel to each other. *fig.* 3.
PISTILLUM: GERMEN turbinatum. STYLI quinque, filiformes, villoſuli, reflexi. STIGMATA ſimplicia, *fig.* 4.	PISTILLUM: GERMEN broad at bottom, narrow at top. STYLES five, filiform, ſlightly villous and reflexed. STIGMATA ſimple. *fig.* 4.
PERICARPIUM: CAPSULA parva, ovata, calyce tecta, unilocularis, quinquevalvis.	SEED-VESSEL: a ſmall ovate CAPSULE covered with the calyx, of one cavity and five valves.
SEMINA plurima, minima, nigricantia.	SEEDS numerous, very minute, of a blackiſh colour.

The *Spergula nodoſa* recommends itſelf to our notice by the beauty of its verdure, and the delicacy of its bloſſoms; the largeneſs and whiteneſs of which, joined to its place of growth, ſerve alſo to diſtinguiſh it from thoſe plants which may have ſome reſemblance to it in their foliage.

It grows in moiſt ſituations, frequently among herbage, and ſometimes out of Walls, Rocks, and Stones.

I have obſerved it growing out of the wall by the *Thames* ſide, in ſeveral places betwixt *Lambeth* and *Putney*.

I have alſo found it on *Hounſlow Heath* with the *Sagina procumbens* and *Centunculus minimus*. It flowers in *July* and *Auguſt*.

About *London* it is a ſcarce plant; but in the north of England it is very common on the borders of rivulets, and grows generally more upright than with us: a ſmall ſpecimen of it, in this ſtate, is repreſented on the plate.

Spergula nodoso.

Turritis glabra.

TURRITIS GLABRA. SMOOTH TOWER-MUSTARD.

TURRITIS *Lin. Gen. Pl.* TETRADYNAMIA SILIQUOSA.

Siliqua longiſſima, angulata. *Cal.* connivens, erectus. *Cor.* erecta.

Raii Syn. Gen. 21. HERBÆ TETRAPETALÆ, SILIQUOSÆ ET SILICULOSÆ.

TURRITIS *glabra* foliis radicalibus dentatis hiſpidis, caulinis integerrimis amplexicaulibus glabris. *Lin. Syſt. Vegetab.* p. 502. *Sp. Pl.* p. 930. *Haller. Hiſt.* n. 455.

TURRITIS *glabra.* *Scopoli Fl. Carn.* n. 839.

BRASSICA ſylveſtris foliis circa radicem cichoraceis. *Bauh. Pin.* 112.

TURRITIS foliis inferioribus cichoraceis, cæteris perfoliatis. *J. R. H.*

BRASSICA ſylveſtris ramoſa tota penè glabra. *Bauh. Pin.* 112.

TURRITIS vulgatior. *Bauh. Hiſt.* II. 836.

TURRITIS *Ger. emac.* 272. *Parkins* 852. *Raii Syn.* p. 293. Tower-Muſtard. *Hudſon Fl. Angl.* ed. 2 p. 291.

RADIX biennis, ſimplex, alba, ſublignoſa, alte in terram, deſcendens, paucis fibrillis capillata.	ROOT biennial, ſimple, white, ſomewhat woody, penetrating deeply into the earth, furniſhed with few fibres.
CAULIS pedalis ad tripedalem, erectus, plerumque ſimplex, firmus, teres, ſolidus, prope terram hirſutus, ſupernè glaber.	STALK from one to three feet in height, upright, generally ſimple, firm, round, ſolid, near the ground hirſute, above ſmooth.
FOLIA radicalia pallide viridia, hirſuta, ad margines ſinuata, tres quatuorve uncias longa, caulina glauca, glabra, integerrima, amplexicaulia, erecta, ſagittata.	LEAVES next the root, of a pale green colour, ſtrongly hairy, jagged on each ſide, three or four inches in length, thoſe of the ſtalk glaucous, perfectly ſmooth and entire, embracing the ſtalk, upright, and arrow-ſhaped.
FLORES in ſummis caulibus parvi, ex albo luteſcentes.	FLOWERS on the top of the ſtalks, ſmall, of a whitiſh yellow colour.
CALYX: PERIANTHIUM tetraphyllum, foliolis ovato-oblongis, erectis, deciduis. *fig.* 1.	CALYX: a PERIANTHIUM of four leaves, the leaves of an ovate oblong ſhape, upright and deciduous. *fig.* 1.
COROLLA: tetrapetala, cruciformis. *Petala* ovato-oblonga, obtuſa, integra, unguibus erectis. *fig.* 2.	COROLLA tetrapetalous and croſs-ſhaped. *Petals* of an ovate-oblong ſhape, obtuſe, entire, claws upright. *fig.* 2.
STAMINA: FILAMENTA ſex, ſubulata, alba, quorum duo breviora. ANTHERÆ ſimplices, flavæ. *fig.* 3.	STAMINA: ſix FILAMENTS, tapering, white, two of which are ſhorter than the others. ANTHERÆ ſimple, and yellow. *fig.* 3.
PISTILLUM: GERMEN longitudine floris, teres, ſubcompreſſum. STYLUS nullus. STIGMA obtuſum. *fig.* 4.	PISTILLUM: GERMEN the length of the flower, round, a little flattened. STYLE none. STIGMA blunt. *fig.* 4.
PERICARPIUM: *Siliquæ* plurimæ, pedicellatæ, erectæ, duos vel tres digitos longæ, caulem fere occultantes, teretiuſculæ, ſubcompreſſæ, obſolete quadrangulæ. *fig.* 5.	SEED-VESSEL: *Pods* numerous, ſtanding on footſtalks, upright, two or three fingers breadth in length, almoſt hiding the ſtalk, roundiſh, ſomewhat flattened, faintly quadrangular. *fig.* 5.
SEMINA parva, numeroſiſſima, ovata, planiuſcula, rufa. *fig.* 6.	SEEDS ſmall, very numerous, ovate, flattiſh, of a reddiſh brown colour. *fig.* 6.

The term *glabra* is only proper when applied to the upper part of this plant, the radical leaves, which generally decay as the plant approaches to maturity, being hairy, like many other plants of the ſame family.

It is found but rarely near *London.* Hitherto I have only noticed it in one ſpot, *viz.* in the lane which leads down by *Charlton* Church, and there but ſparingly; further on in *Kent* it is much more common, as well as in many other parts of *England.* It uſually grows on banks near hedges, and flowers in *June* and *July.*

It varies ſo much in ſize, that the old Botaniſts make two ſpecies of it.

Agaricus floccosus. Shaggy Mushroom.

AGARICUS *Lin. Gen. Pl.* Fungi.

Fungus horizontalis, ſubtus lamelloſus.

Raii Syn. Gen. 1. Fungi.

AGARICUS *floccoſus* ſtipitatus faſciculoſus, pileo ſtipiteque piloſo-ſquamoſis, e flavo-fuſcis.

PICROMYCES tunicatus. *Batarr.* p. 47. t. 8. H.

AGARICUS floccoſus. *Schœffer. Icon. Fung.* t. 61.

Habitat ad radices arborum, plerumque ceſpitoſus.

STIPES palmaris et ultra, craſſitie digiti minimi ſeu major, ſubcylindraceus, firmus, carnoſus, vix fiſtuloſus, interne albus, ſupra annulum nudus, infra filamentoſus, pileo concolor.

ANNULUS parvus, paulo infra pileum poſitus.
VELUM araneoſum, fugaciſſimum.
PILEUS: *Pilei* diameter ſeſquiuncialis ad palmarem, flavo-fuſcus, convexus, in centro nonnunquam faſtigiatus, piloſo-ſquamoſus. *Lamellæ* plurimæ, confertæ, inæquales, ex albo luteſcentes.

Found at the roots of trees, and generally in cluſters.
STALK four inches or more in height, the thickneſs of the little finger or larger, ſomewhat cylindrical, firm, fleſhy, ſcarcely hollow, white within, above the ring naked, below ſhaggy, of the ſame colour as the cap.
RING ſmall, placed a little beneath the cap.
VEIL cob-webby and very fugacious.
CAP: from an inch and a half to four inches in diameter, of a yellow-brown colour, convex, ſometimes riſing to a point in the middle, ſhaggy. *Gills* numerous, cloſe, irregular, of a yellowiſh-white colour.

It doth not appear, that this Muſhroom is deſcribed either by Mr. Ray or Mr. Hudson. It approaches very near to the *ſquamoſus* of the latter, and of which Baron Haller ſeems diſpoſed to conſider it as a variety; to us it appears to be a ſpecies perfectly diſtinct.

Batarra gives an indifferent figure of it; Schæffer an exceeding good one, very expreſſive of the plant we intend: the ſpecimens from whence his drawings were made ſeem to have been ſmaller than ours, and ſome of them more pointed, which they ſometimes are. Thoſe repreſented on our plate were found about the middle of *October*, growing at the bottom of a pear-tree in the garden of Mr. *John Chorley*, at *South Lambeth*, where they come up regularly every year. I have alſo frequently found this ſpecies in the *Oak of Honour Wood* near *Peckham*. So far as I have remarked, it always grows out of wood, in which reſpect it differs from the *fimetarius*, which alſo has a ragged head, but grows out of earth, and has a much longer cap.

When young this Fungus is principally diſtinguiſhed by the roughneſs of its cap, which appears almoſt prickly. Its colour varies from a dingy to a more lively brown.

It is not of the eatable kind; nor do we know any inſtance of it proving poiſonous: the maggots of flies devour it.

Agaricus floccosus.

Polygonum Convolvulus.

POLYGONUM CONVOLVULUS. CLIMBING BUCK-WHEAT.

POLYGONUM *Lin. Gen. Pl.* OCTANDRIA TRIGYNIA.

Cal. 0. *Cor.* 5-partita, calycina. *Sem.* 1. angulatum.

Raii Syn. Gen. 5. HERBÆ FLORE IMPERFECTO SEU STAMINEO VEL APETALO POTIUS.

POLYGONUM *Convolvulus* foliis cordatis, caule volubili angulato, floribus obtuſatis. *Lin. Syſt. Vegetab.* p. 313. *Sp. Pl.* p. 522. *Fl. Suec.* n. 344.

POLYGONUM caule volubili, foliis ſagittatis. *Haller. Hiſt.* n. 1561.

POLYGONUM *Convolvulus.* *Scopoli Fl. Carn.* n. 469.

CONVOLVULUS minor ſemine triangulo. *Bauh. Pin.* 295.

HELXINE ſemine triangulo. *IB.* II. 157.

VOLUBILIS nigra. *Ger. emac.* 863.

CONVOLVULUS minor Atriplicis folio. *Park.* 171.

FEGOPYRUM ſcandens ſylveſtre. *Raii Syn.* p. 144. Black Bind-weed. *Hudſon Fl. Angl.* ed. 2. p. 171. *Lightfoot Fl. Scot.* 208.

RADIX annua, fibroſa, fuſca.	ROOT annual, fibrous, of a brown colour.
CAULIS volubilis, tortus, ramoſus, ramis alternis, fulcro deſtitutus, procumbens, pedalis, id nactus circa calamos et fruticulos ſcandit ſæpe ad altitudinem uſque humanam.	STALK twining, twiſted, branched, branches alternate, when deſtitute of ſupport, procumbent and about a foot in length, when growing about corn or ſhrubs often reaching the height of ſix feet.
FOLIA petiolata, ſagittata, glabra, integerrima, inferne ſolitaria, ſuperne bina et terna, inferioribus frequenter coloratis.	LEAVES ſtanding on foot-ſtalks, arrow-ſhaped, ſmooth, perfectly entire, on the lower part of the ſtalk ſtanding ſingly, on the upper part two and three together, the lowermoſt often coloured.
STIPULÆ parvæ, vaginantes, muticæ.	STIPULÆ ſmall, forming a ſheath round the ſtalk.
FLORES racemoſi, pedunculati, in faſciculos pendulos diſpoſiti.	FLOWERS growing in racemi, ſtanding on foot-ſtalks, and diſpoſed in pendulous cluſters.
RACEMI longi, alterni.	FLOWER-BRANCHES long, and alternate.
CALYX: PERIANTHIUM quinquepartitum, perſiſtens, laciniis tribus exterioribus majoribus, carinatis, viridibus, margine membranaceis, interioribus petaliformibus, coloratis. *fig.* 1.	CALYX: a PERIANTHIUM divided into five ſegments, and permanent, the three outermoſt ſegments larger, keeled, green and membranous on the edge, the innermoſt petal-like and coloured. *fig.* 1.
COROLLA nulla.	COROLLA none.
STAMINA: FILAMENTA octo, fundo calycis inſerta, breviſſima, ſubulata. ANTHERÆ purpureæ, didymæ. *fig.* 3.	STAMINA: eight FILAMENTS fixed into the bottom of the calyx, very ſhort and tapering. ANTHERÆ purple, formed of two lobes. *fig.* 3.
PISTILLUM: GERMEN viride, triquetrum. STYLUS breviſſimus, ſtaminibus paulo brevior. STIGMA capitatum, trilobum. *fig.* 4.	PISTILLUM: GERMEN green, three-cornered. STYLE very ſhort, not quite ſo long as the ſtamina. STIGMA forming a little head, compoſed of three lobes. *fig.* 4.
PERICARPIUM nullum, calyx ſemen continens.	SEED-VESSEL none, the calyx containing the ſeed.
SEMEN unicum, trigonum, nigerrimum. *fig.* 5.	SEED a ſingle one, three-cornered, very black. *fig.* 5.

Some of the ancient Botaniſts, inattentive to the fructification, arrange this plant with the *Convolvuli* or *Bind-weeds.* RAY calls it *Fegopyrum ſcandens ſylveſtre,* but retains the old *Engliſh* name of *Black Bind-weed.* LINNÆUS claſſes it with the *Polygonum,* or *Knot-graſs,* in which genus he alſo includes the *Biſtorta,* the *Perſicaria,* and the *Fagopyrum*; he could not, perhaps, ſcientifically have made more genera of them; yet nature, in all our *Engliſh* plants at leaſt, keeps up a ſtrong diſtinction between them, and as the old eſtabliſhed names of *Biſtort, Perſicaria* or *Arſmart, Knot-graſs,* and *Buck-wheat,* have no tendency in them to miſlead, we have thought it better, in the preſent inſtance, to continue their uſe, than to adopt the new-fangled names of *Buck-wheat Knot-graſs,* or *Binding Snake-weed.* In its fructification this plant is very ſimilar to the Buck-wheat; but differs in having a twining ſtalk, with which it frequently twiſts round other plants, and proves injurious to them, eſpecially in gardens and cultivated fields, where it often grows extremely rampant; in poor land it is an humble plant.

It flowers in *July* and *Auguſt.*

Its ſeeds afford excellent food for ſmall birds. One year I obſerved its foliage, together with that of the Paſſion Flower, very much eaten by the *Ear-wig,* a well known enemy to certain flowers, and no leſs deſtructive to Caterpillars, and which, like the *Cock-roach,* is principally active under the veil of night.

PANICUM VIRIDE. GREEN PANIC GRASS.

PANICUM *Lin. Gen. Pl.* TRIANDRIA DIGYNIA.

Cal. 3-valvis: valvula tertia minima.

Raii Syn. Gen. 27. HERBÆ GRAMINIFOLIÆ FLORE IMPERFECTO CULMIFERÆ.

PANICUM *viride* ſpica tereti, involucellis bifloris faſciculato-piloſis, ſeminibus nervoſis. *Lin. Syſt. Vegetab.* p. 502. *Sp. Pl.* p. 83.

PANICUM ſpica unica, floſculis ſeſſilibus ſolitariis, ſetis numeroſis. *Haller. Hiſt.* n. 1542.

GRAMEN paniceum ſpica ſimplici. *Bauh. Pin.* 8.

GRAMEN panici effigie ſpica ſimplici. *Ger. emac.* 17.

GRAMEN paniceum ſpica ſimplici lævi. *Raii Syn.* p. 393. Panic-Graſs, with a ſingle ſmooth ear. *Hudſon Fl. Angl.* ed. 2. p. 24.

RADIX annua, fibroſa.

CULMI erecti, pedales et ultra, ſimplices, ſubinde ramoſi, quatuor aut quinque geniculis diſtincti, læves.

FOLIA palmaria et ultra, lineas duas, tres, quatuorve quandoque lata, acuminata, lævia, ad margines aſpera, in apricis ſæpe ſanguinea; foliorum *Vagina* ſtriata, lævis, ad internam foliorum baſin, loco membranulæ in pilos ſubtiliſſimos lineam dimidiam aut paulo plus longos terminatæ, qui pili etiam quandoque vaginæ margines ſupremas ipſique foliorum baſi proximas occupant.

SPICA ſimplex, teres, cylindracea, uncialis, ſeſquiuncialis et ultra, craſſitie pennæ anſerinæ majoris, aliquando tota ſpadicea vel atro-purpurea, alias ex viridi luteſcens, luteis pilis, aliquando rubris donata, denſe coagmentatis conſtans ſpiculis, molliuſcula, veſtibus nequaquam adhærens; ſetæ ſeu pili plurimi, erecti, tortuoſi, floſculis triplo longiores, ad lentem aculeati, aculeis erectis. *fig.* 1. 2.

CALYX: *Gluma* uniflora, trivalvis, valvulis duabus oppoſitis, æqualibus, ovatis, obtuſis, nervoſis, *fig.* 4. tertia miuima, inferne poſita. *fig.* 3.

COROLLA: bivalvis, valvulæ ovatæ, concavæ, nitidæ, ſubæquales. *fig.* 5.

STAMINA: FILAMENTA tria, capillaria, breviſſima, corollam paulo excedentia. ANTHERÆ minimæ, purpureæ. *fig.* 6.

PISTILLUM: GERMEN ovatum. STYLI duo, capillares. STIGMATA plumoſa, alba. *fig.* 7.

SEMEN unicum, ſubovatum, tectum, hinc convexum, obſolete nervoſum, inde planiuſculum. *fig.* 8.

ROOT annual, and fibrous.

STALKS upright, a foot high or more, ſimple, now and then branched, furniſhed with four or five joints, and ſmooth.

LEAVES about a hand's breadth or more in length, two or three lines, and ſometimes more, in breadth, pointed, ſmooth, rough on the edges, in open ſituations often of a blood-red colour; *Sheath* of the leaves ſtriated, ſmooth, terminated at the inner baſe of the leaf, inſtead of a membrane, by very fine hairs, about half a line or ſomewhat more in length, which ſometimes alſo occupy the edges of the ſheath on its upper part, and of the leaves at their baſe.

SPIKE ſimple, round, cylindrical, an inch, an inch and a half or more in length, the thickneſs of a large gooſe quill, ſometimes wholly of a reddiſh purple colour, at others greeniſh yellow, furniſhed with yellowiſh, and ſometimes reddiſh hairs, compoſed of ſpiculæ cloſely compacted, ſoft to the touch, never adhering to garments; ſetæ or hairs numerous, upright, crooked, thrice the length of the floſcules, when magnified furniſhed with ſmall prickles, which are upright. *fig.* 1. 2.

CALYX: a *Glume* of one flower, and three valves, two of which are oppoſite, equal, ovate, obtuſe, and ribbed, *fig.* 4. the third is very minute, and placed below the others. *fig.* 3.

COROLLA compoſed of two valves, which are ovate, hollow, ſhining, and nearly equal. *fig.* 5.

STAMINA: three capillary FILAMENTS, very ſhort, a little longer than the corolla. ANTHERÆ very ſmall, and purple. *fig.* 6.

PISTILLUM: GERMEN ovate. STYLES two, capillary. STIGMATA feathery and white. *fig.* 7.

SEED ſingle, ſomewhat ovate, covered, convex, and faintly ribbed on one ſide, on the other flattiſh. *fig.* 8.

In a former part of this work we gave figures of the *Panicum cruſgalli* and *ſanguinale*: we here preſent our readers with two more, being the whole of this genus growing near *London*.

The *viride* is with us the moſt common of the four; yet at a diſtance from town it appears to have few *habitats*: Mr. HUDSON particularizes *Martha's Chapel* near *Guildford*; *Baterſea Fields* is the only place where we find this, and the others, all of which flower about the ſame period, viz. *Auguſt* and *September*.

To correſpond with its name, the *viride* ſhould be always of a green colour; but we often find its foliage red, and its ſpikes reddiſh-brown, and the *verticillatum* vice verſa: we are not therefore to look for an infallible guide in its colour, but the ſpike will always diſtinguiſh it from the *verticillatum*. Between theſe two, indeed, there is a more ſenſible difference to the touch than betwixt the *Alopecurus pratenſis* and *Phleum pratenſe*; the hairs in the ſpike of the *viride* are much longer than thoſe of the *verticillatum*, and though the microſcope diſcovers them to be prickly, *vid. fig.* 1. 2. yet theſe being upright diſcover no manifeſt roughneſs.

Agriculturally it may be conſidered rather as a weed than an uſeful graſs.

Sparrows are remarkably fond of its ſeeds: the whole of this genus, when cultivated in a garden, require to be protected from them.

GRASS.

IFERÆ.

nervoſis. Lin.

n. 1542.

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Panicum viride.

Panicum verticillatum.

PANICUM VERTICILLATUM. ROUGH PANIC GRASS.

PANICUM. *Lin. Gen. Pl.* TRIANDRIA DIGYNIA.

Cal. trivalvis, valvula tertia minima.

Raii Syn. Gen. 27. HERBÆ GRAMINIFOLIÆ FLORE IMPERFECTO CULMIFERÆ.

PANICUM *verticillatum* ſpica verticillata racemulis quaternis, involucellis unifloris biſetis, culmis diffuſis. *Lin. Syſt. Vegetab.* p. 89. *Sp. Pl.* p. 82.

PANICUM ſpica unica paniculata, ſetis paucioribus. *Haller. Hiſt.* n. 1543.

GRAMEN paniceum ſpica aſpera. *Bauh. Pin.* p. 8.

PANICUM vulgare ſpica ſimplici et aſpera. *Inſt.* 515. *Scheuch. Agroſt.* 47. *Raii Syn.* p. 394. Rough-eared Panic-Graſs. *Hudſon Fl. Angl. ed.* 2. p. 24.

Fig. 1. Racemula ramoſa magn. nat.	*Fig.* 1. One of the ſmall branched racemi of its natural ſize.
Fig. 2. Pars ejuſdem auct.	*Fig.* 2. A part of the ſame magnified.
Fig. 3. Glumæ calycis auct.	*Fig.* 3. The glumes of the calyx magnified.
Fig. 4. Corolla.	*Fig.* 4. The Corolla.
Fig. 5. Stamina.	*Fig.* 5. The Stamina.
Fig. 6. Piſtillum.	*Fig.* 6. The Piſtillum.
Fig. 7. Semen magn. nat.	*Fig.* 7. The ſeed of its natural ſize.
Fig. 8. Idem auct.	*Fig.* 8. The ſame magnified.

The *Panicum verticillatum* in its general habit agrees exactly with the *viride*, but in the ſize and form of the ſpike, and the parts compoſing it, it differs very materially: the whole plant is generally one-third larger than that of the viride; the ſpike is larger, and much leſs compact; it is evidently compoſed of little branches, which grow ſomewhat in whirls, whence its name. The ſetæ or hairs of the ſpike are conſiderably ſhorter than thoſe of the viride, and differ from them particularly in being hooked, ſo that the ſpike drawn over the back of the hand or cuff of the coat adheres very ſtrongly; and where ſeveral ſpikes grow near each other, they are very apt, from this cauſe, to become entangled.

I found this plant growing laſt year very ſparingly in the Gardeners Grounds *Baterſea Fields*, with the *viride*, and flowering at the ſame time. Mr. RAY deſcribes it as having been found in a Turnip Field betwixt *Putney* and *Roehampton*, alſo beyond the *Neat-houſes* by the *Thames* ſide, going from the Horſe Ferry above *Weſtminſter* to *Chelſea*. SCHEUCHZER remarks, that it is a troubleſome weed in the gardens at *Paris*.

SAMOLUS VALERANDI. ROUND-LEAVED WATER-PIMPERNEL.

SAMOLUS *Lin. Gen. Pl.* PENTANDRIA MONOGYNIA.

Cor. hypocrateriformis. *Stamina* munita ſquamulis corollæ. *Capſ.* unilocularis.

Raii Syn. Gen. 18. HERBÆ FRUCTU SICCO SINGULARI FLORE MONOPETALO.

SAMOLUS *Valerandi. Lin. Syſt. Vegetab. p.* 177. *Sp. Pl. p.* 243. *Fl. Suec. n.* 192.

SAMOLUS. *Haller Hiſt. n.* 707.

ANAGALLIS aquatica, rotundo folio non crenato. *Bauhin Pin.* 252.

SAMOLUS Valerandi. *Bauh. Hiſt.* 3. *p.* 791.

ALSINE aquatica, foliis rotundis becabungæ. *Moriſ. Hiſt.* 2. *p.* 323. *ſ.* 3. *t.* 24. *f.* 28.

ANAGALLIS aquatica rotundifolia. *Ger. emac.* 620.

ANAGALLIS aquatica tertia Lobelii folio ſubrotundo non crenato. *Parkinſ. p.* 1237. *Raii Syn.* 283. Round-Leaved Water-Pimpernel. *Hudſon Fl. Angl. ed.* 2. *p.* 94. *Lightfoot Fl. Scot. p.* 142. *Oeder Fl. Dan. icon.* 198.

RADIX perennis, fibroſa, alba.	ROOT perennial, fibrous, and white.
CAULIS dodrantalis, aut pedalis, erectus, rigidulus, teres, glaber, plerumque ramoſus.	STALK a ſpan or a foot in heighth, upright, ſomewhat rigid, round, ſmooth, and generally branched.
FOLIA alterna, petiolata, ovata, obtuſa, integerrima, nitida, venis paucis, remotis, notata.	LEAVES alternate, ſtanding on foot-ſtalks, ovate, obtuſe, perfectly entire, ſhining, marked with few veins, and thoſe diſtant.
PETIOLI breves, lati.	LEAF-STALKS ſhort, and broad.
FLORES parvi, albi, ſpicati.	FLOWERS ſmall, white, growing in ſpikes.
PEDUNCULI plurimi, ſparſi, ſuberecti, uniflori, teretes, bractæâ lanceolatâ medio inſtructi.	FLOWER-STALKS numerous, placed in no regular order, nearly upright, each ſupporting one flower, round, having a ſmall pointed floral leaf growing from the middle of each.
CALYX: PERIANTHIUM quinque-partitum, ſuperum, baſi obtuſum, laciniis erectis, perſiſtentibus, *fig.* 1.	CALYX: a PERIANTHIUM deeply divided into five ſegments, placed above the germen, blunt at the baſe, the ſegments upright and permanent, *fig.* 1.
COROLLA monopetala, hypocrateriformis. *Tubus* breviſſimus, longitudine calycis, patulus. *Limbus* planus, quinque-partitus, obtuſus. *Squamulæ* quinque, breviſſimæ, ad baſin ſinus limbi, conniventes, *fig.* 2, 3.	COROLLA monopetalous, ſalver-ſhaped. *Tube* very ſhort, the length of the calyx, open. *Limb* flat, deeply divided into five ſegments, which are obtuſe; five very ſhort *Scales* which cloſe inward, are ſituated at the mouth of this tube, *fig.* 2, 3.
STAMINA: FILAMENTA quinque, brevia, infra laciniam corollæ ſingula. ANTHERÆ conniventes, luteæ, intra tubum corollæ, *fig.* 4.	STAMINA: five ſhort FILAMENTS placed beneath each ſegment of the corolla. ANTHERÆ cloſing together, of a yellow colour, within the tube of the corolla, *fig.* 4.
PISTILLUM: GERMEN inferum. STYLUS filiformis, longitudine fere ſtaminum. STIGMA capitatum, *fig.* 5.	PISTILLUM: GERMEN beneath the calyx. STYLE thread-ſhaped, nearly the length of the ſtamina. STIGMA forming a little head, *fig.* 5.
PERICARPIUM: *Capſula* ſubrotunda, calyce cincta, unilocularis, ore quinquedentato, dentibus reflexis, *fig.* 6.	SEED-VESSEL: a roundiſh *Capſule*, covered by the calyx, of one cavity, the mouth having five teeth, which turn back, *fig.* 6.
SEMINA plurima, exigua, nigra. *Receptaculum* globoſum, magnum, *fig.* 7, 8.	SEEDS numerous, ſmall, and black. *Receptacle* round and large, *fig.* 7, 8.

Of this genus there is at preſent only one known ſpecies, and that an inhabitant of every quarter of the globe: neverthelefs, it is found but ſparingly with us; but may with certainty be met with on the edges of the wet ditches about *Woolwich, Charlton*, and *Greenwich*, more particularly in the road leading from *New-Croſs* Turnpike to the *Iſland of St. Helena, Rotherhithe.*

It flowers in *July*.

No particular uſes are attributed to it.

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Samolus Valerandi.

Silene anglica.

SILENE ANGLICA. ENGLISH CATCHFLY.

SILENE *Lin. Gen. Pl.* DECANDRIA TRIGYNIA.

Cal. ventricoſus. *Petala* 5-unguiculata: coronata ad faucem. *Capſ.* 3-locularis.

Raii Syn. Gen. 24. HERBÆ PENTAPETALÆ VASCULIFERÆ.

SILENE *anglica* hirſuta petalis emarginatis, floribus erectis, fructibus reflexis pedunculatis alternis. *Lin. Syſt. Vegetab. p.* 350. *Sp. Pl.* 594.

SILENE *anglica* hirſuta petalis ſubintegerrimis, floribus ſubſpicatis pedunculatis alternis erectis, fructibus divaricato-reflexis. *Hudſon Fl. Angl. ed.* 2. *p.* 187.

VISCAGO ceraſtii foliis vaſculis pendulis Anglica. *Dill. Elth.* 417. *t.* 309. *f.* 398.

LYCHNIS ſylveſtris hirſuta annua, flore minore albo. *Vaill. Pariſ.* 121. *t.* 16. *f.* 12.

LYCHNIS ſylveſtris flore albo minimo. *Raii Syn. p.* 339. Small Corn Campion, with a very ſmall white flower.

RADIX annua, ſimplex.

CAULIS plerumque pedalis, et ultra, erectus, teres, hirſutus, viſcidus, articulatus, geniculis tumidis, ramoſus, in horto culta ramoſior, debiliorque evadit, et geniculi magis intumeſcunt.

RAMI alterni, cauli ſimiles.

FOLIA oppoſita, connata, lanceolata, ſubundulata, integerrima, hirſutula, ſubviſcida, punctis prominulis aſperula, ad baſin pilis longis ciliata.

FLORES albidi, minimi, axillares, ſubſpicati, pedunculati.

PEDUNCULI variæ longitudinis unguiculares et pollicares, teretes, ſuperne incraſſati, viſcidi, primo erecti, dein reflexi, demum ſeminibus maturis ſuberecti.

CALYX: PERIANTHIUM monophyllum, tubuloſum, quinquedentatum, dentibus apice rubris, oblongum, ſulcis decem profunde exaratum, piloſum, viſcidum, perſiſtens, *fig.* 1.

COROLLA: PETALA quinque. *Ungues* anguſti, longitudine calycis. *Lamina* integra ſeu emarginata, lateribus ſæpe involutis, ſquamula ad baſin laminæ bifida, erecta, *fig.* 2.

STAMINA: FILAMENTA decem, ſubulata, alba, ad lentem hirſuta. ANTHERÆ oblongæ, bilobæ, purpureæ. POLLEN album, *fig.* 3.

PISTILLUM: GERMEN viride, nitidum, ſubconicum; STYLI tres, albi, erecti, villoſi, germine breviores, *fig.* 4, 5. Glandula nectarifera ad baſin germinis, *fig.* 6.

PERICARPIUM: CAPSULA ovata, calyce tecta, trilocularis, apice ſexfariam dehiſcens, *fig.* 7.

SEMINA plurima, nigricantia, reniformia, ad lentem aſpera, *fig.* 8.

ROOT annual and ſimple.

STALK about a foot or more in heighth, upright, round, hirſute, viſcid, jointed, the joints ſwelled, branched; cultivated in the garden, it becomes more branched, weaker, and the joints more ſwelled.

BRANCHES alternate, like the ſtalk.

LEAVES oppoſite, connate, lanceolate, ſomewhat waved, entire, ſlightly hairy, and ſomewhat viſcid, roughiſh, with little prominent points, at the baſe edged with longer hairs.

FLOWERS whitiſh, very ſmall, growing from the alæ of the leaves, forming a kind of ſpike, ſtanding on foot-ſtalks.

FLOWER-STALKS of various lengths, from half an inch to an inch, round, thickened upwards, viſcid, at firſt upright, afterwards turned downwards, finally, when the ſeeds are upright, becoming nearly upright.

CALYX: a PERIANTHIUM of one leaf, tubular, having five teeth, which are red at the tips, oblong, marked with ten deep grooves, hairy, viſcid, and permanent, *fig.* 1.

COROLLA: five PETALS. *Claws* narrow, the length of the calyx. *Lamina* entire, or nicked, the ſides often rolled in, the ſcale at the baſe of the lamina bifid and upright, *fig.* 2.

STAMINA: ten FILAMENTS, tapering, white, hairy when magnified. ANTHERÆ oblong, formed of two lobes and purple. POLLEN white, *fig.* 3.

PISTILLUM: GERMEN green, ſhining, ſomewhat conical. STYLES three, white, upright, villous, ſhorter than the germen, *fig.* 4, 5. A nectariferous Gland at the baſe of the germen, *fig.* 6.

SEED-VESSEL: an ovate CAPSULE, covered by the calyx, of three cavities, opening at top, with ſix teeth, *fig.* 7.

SEEDS numerous, blackiſh, kidney-ſhaped, rough when viewed with a magnifier, *fig.* 8.

The preſent, though not a ſhewy plant, may be numbered among the more rare ones in the neighbourhood of *London*, as well as in many other parts of *Great-Britain;* nor does it appear to be common throughout *Europe:* yet, in particular ſpots, it is found in great plenty, as in the corn-fields about *Coombe-Wood.* I have alſo ſeen it growing in great abundance in the corn-fields near *Newport*, in the *Iſle of Wight*.

It flowers in *July*.

DILLENIUS gives a figure of it in his *Hortus Elthamenſis*, which is too diminutive: his character of *vaſcula pendula* is not too much to be depended on, ſince it frequently happens that they are not ſo.

ARENARIA SERPYLLIFOLIA. THYME-LEAVED CHICKWEED.

ARENARIA *Lin. Gen. Pl.* DECANDRIA TRIGYNIA.

Cal. 5-phyllus, patens. *Petala* 5-integra. *Capſ.* 1-locularis, polyſperma.

Raii Syn. Gen. 24. HERBÆ PENTAPETALÆ VASCULIFERÆ.

ARENARIA *ſerpyllifolia* foliis ſubovatis acutis ſeſſilibus, corollis calyce brevioribus. *Lin. Syſt. Veg. p.* 353. *Sp. Pl. p.* 606. *Fl. Suec. n.* 398.

STELLARIA *ſerpyllifolia.* *Scopoli Fl. Carn. n.* 544.

ALSINE foliis ovato-lanceolatis, ſubhirſutis, petalis calyce brevioribus. *Haller Hiſt. n.* 875.

ALSINE minor multicaulis. *Bauh. Pin.* 250.

ALSINE minima. *Ger. emac.* 612. *Raii Syn.* 349. The leaſt Chickweed. *Hudſon Fl. Angl. p.* 191. *Lightfoot Fl. Scot. p.* 230.

RADIX annua, fibroſa, albida.	ROOT annual, fibrous, and whitiſh.
CAULES plerumque plures, palmares, ſubereċti, teretes, pubeſcentes, geniculati, ut plurimum ſimplices, apice dichotomi, ramis bifidis.	STALKS for the moſt part numerous, about four inches high, nearly upright, round, downy, jointed, for the moſt part ſimple, dichotomous at top, branches bifid.
FOLIA oppoſita, ovata, acuta, ſeſſilia, rigidula, hirſutula, ad lentem ciliata, nervo medio ſubtus conſpicuo, inferioribus crebrioribus.	LEAVES oppoſite, ovate, pointed, ſeſſile, a little rigid and ſlightly hirſute, viſibly ciliated when magnified, the midrib conſpicuous on the under ſide, the lowermoſt leaves growing thickeſt together.
FLORES albi, pedunculati.	FLOWERS white, ſtanding on foot-ſtalks.
PEDUNCULI teretes, foliis longiores, uniflori, e dichotomia caulis, ad unum latus inclinati, ſubereċti.	FLOWER-STALKS round, longer than the leaves, ſupporting one flower, proceeding from the forking of the ſtalk, inclined to one ſide, and nearly upright.
CALYX: PERIANTHIUM pentaphyllum, foliolis lanceolatis, acuminatis, hirſutulis, carinatis, *fig.* 1.	CALYX: a PERIANTHIUM of five leaves, which are lanceolate, tapering to a point, ſomewhat hairy and keeled, *fig.* 1.
COROLLA: PETALA quinque, alba, ovata, obtuſa, calyce duplo fere breviora, *fig.* 2.	COROLLA: five petals, of a white colour, ovate, obtuſe, about half the length of the calyx, *fig.* 2.
STAMINA: FILAMENTA decem, alba, capillaria, longitudine corollæ. ANTHERÆ ſubrotundæ, albæ, *fig.* 3.	STAMINA: ten FILAMENTS, white, very fine, the length of the corolla. ANTHERÆ roundiſh and white, *fig.* 3.
PISTILLUM: GERMEN viride, ſubrotundum. STYLI tres, albi, filiformes reflexi. STIGMATA ſimplicia, *fig.* 4.	PISTILLUM: GERMEN green, roundiſh. STYLES three, white, filiform and reflexed. STIGMATA ſimple, *fig.* 4.
PERICARPIUM: *Capſula* ovata, ſubventricoſa, teċta, unilocularis, apice quinquefariam, ſeu ſex fariam dehiſcens, *fig.* 5.	SEED-VESSEL: an ovate *Capſule*, ſomewhat bellying out at bottom, covered by the calyx, of one cavity, opening at top, with five or ſix teeth, *fig.* 5.
SEMINA plurima, minima, reniformia, ad lentem lineis inſculptis pulchre reticulata, *fig.* 6.	SEEDS numerous, very ſmall, kidney-ſhaped, beautifully reticulated with impreſſed lines, viſible when magnified, *fig.* 6.

This plant, one of the leaſt of the genus *Arenaria,* is very common on walls, among rubbiſh, and in dry and barren places. It flowers in *June.*

There is a neatneſs in it ſufficient to recommend it as an ornamental plant for walls, rocks, &c. on which it will grow moſt readily.

The rigidity of its ſtalks, and thyme-like form of its leaves, readily diſtinguiſh it from all its congeners.

Arenaria serpyllifolia.

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SONCHUS ARVENSIS. CORN SOW-THISTLE.

SONCHUS *Lin. Gen. Pl.* SYNGENESIA POLYGAMIA ÆQUALIS.

Recept. nudum. *Cal.* imbricatus, ventricoſus. *Pappus* piloſus.

Raii Syn Gen. 5. HERBÆ FLORE COMPOSITO NATURA PLENO LACTESCENTES.

SONCHUS *arvenſis* pedunculis calycibuſque hiſpidis ſubumbellatis, foliis runcinatis baſi cordatis. *Lin. Syſt. Vegetab. p.* 594. *Spec. Pl.* 1116. *Fl. Suec. n.* 687.

SONCHUS foliis amplexicaulibus ſemipinnatis ſerratis, calycibus hiſpidis. *Haller. Hiſt.* 23.

HIERACIUM arvenſe. *Scopoli Fl. Carniol. n.* 974.

HIERACIUM majus folio ſonchi. *Bauhin. Pin.* 126.

SONCHUS repens multis Hieracium majus. *Bauh. Hiſt.* 2. 170.

SONCHUS arboreſcens. *Ger. emac.* 294. *Raii Syn. p.* 163. Tree Sow-thiſtle. *Hudſon. Fl. Angl. ed.* 2. *p.* 337. *Lightfoot Fl. Scot.* 427.

RADIX *perennis*, lactiflua, *longe, lateque repens* difficulter eruta.	ROOT *perennial*, milky, *creeping far and wide*, with difficulty eradicated.
CAULIS bi ſeu tripedalis et ultra, erectus, fiſtuloſus, lacteſcens, ſubangulatus, lævis, inferne ſæpe purpureus, ſuperne ramoſus.	STALK from two to three feet high, or more, upright, hollow, milky, ſomewhat angular, ſmooth, often purple below, above branched.
FOLIA alterna, runcinata, *baſi cordata*, amplexicaulia, lævia, nitidula, ſubtus pallidiora, ſpinis mollicellis circa margines donata.	LEAVES alternate, like thoſe of Dandelion, *heart-ſhaped at the baſe*, embracing the ſtalk, ſmooth, ſhining, paler on the under ſide, the edges furniſhed with ſoftiſh prickles.
FLORES ſubumbellati, *magni*, lutei.	FLOWERS growing in a kind of umbel, *large* and yellow.
PEDUNCULI longi, teretes, *pilis longis luteis, globuligeris* veſtiti.	FLOWER-STALKS long, round, covered *with long yellow hairs, bearing globules at their extremity.*
CALYX communis priuſquam floſculi expanduntur cylindricus, apice truncatus, poſtea ventricoſo-conicus, ſquamis plurimis, erectis, inæqualibus, carinatis, ſordide viridibus, *hirſutiſſimis*, pilis ficut in pedunculis.	CALYX common to all the florets, before their expanſion, cylindrical and cut off at the extremity, afterwards bellying at the baſe and conical, the ſcales numerous, upright, unequal, keeled, of a dirty green colour, and extremely hairy, the hairs ſimilar to thoſe on the footſtalks.
COROLLA compoſita, imbricata, *Corollulis* hermaphroditis, numeroſis, æqualibus.	COROLLA compound and imbricated, the Florets hermaphrodite, numerous and equal.
Propria monopetala, *tubus* albus, tenuis, ſuperne piloſus, limbus luteus, longitudine fere tubi marginibus ſæpe ſubinvolutis, quinquedentatus, *fig.* 1.	*Each Floret* monopetalous, the *tube* white, ſlender, hairy above, the flat part yellow, almoſt the length of the tube, the edges frequently rolled inward, furniſhed with five teeth, *fig.* 1.
ANTHERÆ in tubum flavum, ſubangulatum, coalitæ.	ANTHERÆ united into a yellow, and ſomewhat angular tube.
STIGMATA duo, filiformia, reflexa.	STIGMATA two, thread-ſhaped, reflexed.
SEMEN ovato-oblongum, badium, ſulcatum, angulis ad lentem tranſverſim rugoſis, pappoſum, pappo ſimplici, ſeſſili, *fig.* 2.	SEED of an oblong egg-ſhape, bay colour, and grooved, the angles tranſverſely wrinkled when magnified, downy, the down ſimple, and ſeſſile, *fig.* 2.

This ſpecies of *Sonchus* is properly termed *arvenſis*, being commonly found in corn-fields, in which its large yellow bloſſoms, towering above the corn, render it a very conſpicuous plant; theſe alone are ſufficient to diſtinguiſh it from the common Sow-thiſtle, it has beſides two other very diſtinct characters; the one a creeping root, whereby it becomes very noxious to the huſbandman; the other, numerous yellow hairs, with little globules at their extremities, thickly ſpread over the calyces and flower-ſtalks.

It bloſſoms in *July* and *Auguſt;* many of its ſeeds prove abortive.

JUNGERMANNIA COMPLANATA. FLAT JUNGERMANNIA.

JUNGERMANNIA *Lin. Gen. Pl.* CRYPTOGAMIA ALGÆ.

MASC. pedunculatus, nudus. *Anthera* quadrivalvis.
FÆM. ſeſſilis, nudus, ſeminibus ſubrotundis.

Raii Syn. Gen. 18. MUSCI.

JUNGERMANNIA *complanata* ſurculis repentibus, foliolis inferne auriculatis, duplicato-imbricatis, ramis æqualibus. *Lin. Syſt. Vegetab. p.* 803. *Sp. Pl. p.* 1599. *Fl. Suec.* 1041. *Weis. Cryptog. p.* 124.

JUNGERMANNIA foliis rotundis alterne imbricatis, caule plano multifloro, ſetis breviſſimis. *Haller Hiſt. n.* 1860.

JUNGERMANNIA complanata: ſurculo reptante, foliis ſubrotundis ſerie duplici ordinatis, ſubtus appendiculatis; vaginis ramorum plano-truncatis. *Necker. Meth. Muſc. p.* 142.

LICHENASTRUM imbricatum majus ſquamis compreſſis et planis. *Dillen. Muſc.* 496. *t.* 72. *f.* 26.

JUNGERMANNIA foliis circinatis imbricatim diſpoſitis ex viridi flaveſcentibus. *Michel. Gen.* 7. *t.* 5. *f.* 21.

LICHENASTRUM imbricatum majus. *Raii Syn.* 111. *Hudſon. Fl. Angl. p.* 514. *Lightfoot. Fl. Scot. p.* 781.

Deſcriptio ex WEIS.	Deſcription from WEIS.
SURCULIS variæ longitudinis, ab unciali ad biuncialem longitudinem, planis, inordinate ramoſis ad cortices arborum, latis cæſpitibus repit.	SURCULI of various lengths, from one to two inches, flat, irregularly branched, creeping on the bark of the trees in large patches.
FOLIOLA denſe imbricata, alterna, rotunda, ſubpellucida, plana, ſurculi nervum ſuperne tegunt; inferne nervo adherent parvæ, rotundæ ſquamulæ. Color pallide e luteo viridis. Recens mollis tactu eſt, aqua madida tota flacceſcit. Ad extremitates, et paſſim ad exortum ramolorum prodeunt *thecæ* planæ, ſquamis duplo vel triplo longiores, dilute virides, truncatæ, e quibus *ſetæ* breves, lineam non excedentes emergunt, tenuiſſimæ, cum parvis nigris capitulis, in fuſcas lacinulas piloſas diſſilientes.	LEAVES of a pale yellow-green colour, cloſely imbricated, alternate, round, ſomewhat tranſparent, flat, above entirely covering the mid-rib of the ſurculus, beneath ſmall round ſcales adhere to the mid-rib, the whole plant, when freſh, is ſoft to the touch, moiſtened with water it grows flaccid. At the extremities, and here and there at the origin of the branches, proceed flat *ſheaths* appearing truncated or cut off at top, from whence proceed ſhort ſetæ or peduncles about a line in length, very ſlender, and terminated by ſmall black heads ſplitting into four brown hairy ſegments.
Fig. 1. Planta magn. nat.	*Fig.* 1. The plant of its natural ſize.
Fig. 2. Pars ejuſdem lente aucta.	*Fig.* 2. A part of the ſame magnified.
Fig. 3. Pars ejuſdem inferior.	*Fig.* 3. The underſide of the ſame.
Fig. 4. Theca ſeu Vagina.	*Fig.* 4. The Caſe or Sheath.
Fig. 5. Pedunculus.	*Fig.* 5. The Peduncle.
Fig. 6. Capitulum adhuc integrum.	*Fig.* 6. The Capitulum as yet entire.
Fig. 7. Capitulum findens pulveremque ſpargens.	*Fig.* 7. The Capitulum ſplitting and diſcharging its powder.
Fig. 8. Capitulum demiſſo pulvere.	*Fig.* 8. The Capitulum with the powder diſcharged.

The name of *Jungermannia* was given to this genus by MICHELI in honour of JUNGERMANNUS, a botaniſt of the laſt century.

As LINNÆUS conſiders the Capſules of the Moſſes as the *Antheræ* containing *Pollen*, ſo in like manner he regards the *Capitula* of the preſent genus as containing Pollen alſo, and the little apparently pulverulent balls, viſible only on a few of the *Jungermanniæ*, but found on moſt of the *Mnia* as the female flowers, producing ſeeds. Vid. *Generic Character*.

With all due deference to ſuch reſpectable authority, we are of opinion, that the character of this genus would be leſs complex, and equally complete, without calling in thoſe balls or ſphærophylli, as NECKER terms them, at all.

The *Capitula*, or little heads, ſplitting when ripe into four parts, replete with a fine powder (whether pollen or ſeed is immaterial) attached to numerous hairs growing to the inſide of the Capitula, are characters which will in all caſes ſufficiently diſtinguiſh this genus. The little heads of theſe plants are capable of affording much microſcopic entertainment. Take a head ready to burſt open, place it before the microſcope, aſſiſt its opening with the point of a needle, and the elaſtic hairs on the inſide will inſtantly appear in motion, and throw off the globules attached to them in great numbers, and with conſiderable force.

The preſent ſpecies is one of the moſt common of this genus, and may be found in great plenty and perfection about the end of *January*, ſpreading on the bark of the Oak and other trees in woods, particularly *Charlton-Wood*.

It is diſtinguiſhable from another, equally common, by the pale green colour of its leaves.

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Jungermannia complanata.

Raphanus Raphanistrum.

RAPHANUS RAPHANISTRUM. WILD RADISH.

RAPHANUS *Lin. Gen. Pl.* TETRADYNAMIA SILIQUOSA.

Cal. clauſus. *Siliqua* toroſa, ſubarticulata, teres. *Glandulæ* melliferæ 2 inter ſtamina breviora et piſtillum, totidem inter ſtamina longiora et calycem.

Raii Syn. Gen. 21. HERBÆ TETRAPETALÆ SILIQUOSÆ ET SILICULOSÆ.

RAPHANUS *Raphaniſtrum* ſiliquis teretibus articulatis lævibus unilocularibus. *Lin. Syſt. Vegetab. p.* 504. *Sp. Pl.* 935. *Fl. Suec. n.* 612. *Haller Hiſt. n.* 468.

RAPHANISTRUM ſegetum, flore luteo vel pallido. *Tourneſ. Inſt.* 240.

RAPISTRUM flore luteo, ſiliqua glabra articulata. *Raii Syn. p.* 296.

RAPHANUS ſylveſtris. *Ger. emac.* 240. *Hudſon Fl. Angl. p.* 289. *Lightfoot Fl. Scot. p.* 362.

RADIX annua, ſimplex, fibroſa, pallide fuſca.

CAULIS pedalis ad ſeſquipedalem, erectus, teres, ſolidus, hiſpidus, glaucus, ad baſin uſque plerumque ramoſus, ramis ſæpe longitudine caulis, ad baſin purpureis.

FOLIA petiolata, pinnatifida, alterna, ſcabra, inferioribus pinnarum quatuor aut quinque parium, ſuperioribus duarum triumve, omnibus obtuſiuſcule ſerratis ſeu dentatis, dentibus apice purpureis.

FLORES pedunculati, lutei, albi, ſeu carnei, venis nigricantibus picti.

CALYX: PERIANTHIUM tetraphyllum, erectum, hiſpidulum, foliolis oblongis, parallelis, conniventibus, deciduis, baſi gibbis, *fig.* 1.

COROLLA tetrapetala, cruciformis: petala alba ſive lutea vel purpuraſcentia, venoſa: venis nigricantibus, obcordata, integra, patentia, ſenſim in ungues calyce paulo longiores attenuata, *fig.* 2.

STAMINA: FILAMENTA ſex, ſubulata, erecta; quorum duo oppoſita longitudine calycis, quatuor vero unguibus longiora. ANTHERÆ oblongæ, erectæ, ſagittatæ, *fig.* 3.

PISTILLUM: GERMEN oblongum, ventricoſum, attenuatum, longitudine ſtaminum. STYLUS vix ullus. STIGMA capitatum, integrum, *fig.* 4.

PERICARPIUM: *Siliqua* teres, articulata, articulis tribus ad ſex et ultra, ſulcatis, unilocularibus, monoſpermis, geniculis attenuatis, apice roſtrata, roſtro lineari compreſſo, glabra, *fig.* 5.

SEMINA ſubrotunda, ferruginea, glaberrima, magnitudine ſeminum Raphani ſativi, *fig.* 6.

ROOT annual, ſimple, fibrous, and of a pale brown colour.

STALK from a foot to a foot and a half in height, upright, round, ſolid, hiſpid, glaucous, generally branched quite down to the bottom, branches often as long as the ſtalk, and purple at bottom.

LEAVES ſtanding on foot-ſtalks, pinnatifid, alternate, rough, the lowermoſt conſiſting of four or five pair of pinnæ, the uppermoſt of two or three, all of them obtuſely ſerrated or toothed, the teeth purple at the tips.

FLOWERS ſtanding on foot-ſtalks, yellow, white or fleſh-coloured, painted with blackiſh veins.

CALYX: a PERIANTHIUM of four leaves, upright, a little hiſpid, the leaves oblong, parallel, cloſing together, deciduous, gibbous at the baſe, *fig.* 1.

COROLLA compoſed of four petals, which are white, yellow, or purpliſh, veined (the veins blackiſh) inverſely heart-ſhaped, entire, ſpreading, terminating gradually in claws, a little longer than the calyx, *fig.* 2.

STAMINA: ſix FILAMENTS, tapering, upright; of which two oppoſite ones are of the length of the calyx, and four of the length of the claws of the corolla. ANTHERÆ oblong, upright, arrow-ſhaped, *fig.* 3.

PISTILLUM: GERMEN oblong, bellying out a little, tapering, the length of the ſtamina. STYLE ſcarce any. STIGMA forming a little head, and entire, *fig.* 4.

SEED-VESSEL a round jointed *Pod*, compoſed of three, ſix, or more joints, which are grooved, of one cavity, containing a ſingle ſeed, the joints cut in, the apex terminating in a linear, flat, ſmooth beak, *fig.* 5.

SEEDS roundiſh, ferrugineous, very ſmooth, the ſize of the common garden Radiſh, *fig.* 6.

The preſent plant, in the colour of its bloſſom, is one of the moſt variable we are acquainted with, being found with white, pale-red, and yellow flowers; as the yellow is the moſt predominant with us, we have figured that variety.

Though the bloſſoms vary ſo widely as to colour, they are all in general ſtriped with purpliſh veins; a character which contributes with ſeveral others to diſtinguiſh it from the *Sinapis Arvenſis*, or *Charlock*, to which it bears no ſmall reſemblance; ſome of the moſt ſtriking differences between theſe two plants we ſhall here enumerate.

The Charlock uſually grows one-third taller than the Radiſh. The ſtalks, which in the Charlock are finely grooved, hirſute, and commonly of a deep red colour, in the Radiſh are ſmooth, yet hiſpid, and uſually glaucous. The Charlock has often an unbranched ſtem; the Radiſh is more frequently branched quite down to the bottom; beſides, the calyx is upright and cloſe in the Radiſh; in the Charlock it is ſpreading. The flowers of the Charlock alſo are ſmaller, and always yellow.

It is a common and noxious inhabitant of Corn-fields, and flowers in *July* and *Auguſt*.

LINNÆUS has given a particular paper on this plant in the *Amœnitates Academicæ*, in which he endeavours to prove, that an epidemic ſpaſmodic diſeaſe, common in ſome parts of *Sweden*, is owing to the ſeeds of this plant being ground with the corn and eaten by the inhabitants.

BRYUM BARBATUM. BEARDED BRYUM.

BRYUM *Lin. Gen. Pl.* CRYPTOGAMIA MUSCI.

Anthera operculata. *Calyptra* lævis. *Filamentum* e tuberculo terminali ortum.

Raii Syn. Gen. 1. MUSCI.

BRYUM *barbatum* antheris erectis oblongis barbatis, operculo acuminato obliquo, pedunculis lateralibus.

BRYUM unguiculatum et barbatum tenuius et ſtellatum. *Dillen. Muſc.* tab. 48. fig. 48. Small ſtar-topped, clawed, and bearded Heads.

DENSISSIMIS cæſpitibus modo Bryi purpurei ad muros et aggeres naſcitur, *fig.* 1,	FORMS a thick turf on walls and banks, in the manner of the Bryum purpureum, *fig.* 1.
CAULICULI ſemunciales aut paulo plus, ramoſi, erecti, folioſi, *fig.* 2, 3.	STALKS half an inch or ſomewhat more in height, branched, upright, and leafy, *fig.* 2, 3.
FOLIA e luteo-viridia, denſa, lanceolata, acuta, inferioribus ſuberectis, ſupremis patentibus, *fig.* 4. auct.	LEAVES of a yellowiſh-green colour, growing thick together, lanceolate, pointed, the lowermoſt nearly upright, the uppermoſt ſpreading, *fig.* 4. magnified.
PEDUNCULI ſemunciales et ultra, ex imo ſeu ex medio nunquam e ſummitate ſurculi enati, ſingulares vel plures ex eodem ſurculo, rubentes, nitidi, flexuoſi, bulbillo oblongo nudo ſuperne rubro prædití, *fig.* 5.	PEDUNCLES half an inch or more in length, proceeding from the bottom or middle, but never from the top of the ſurculus, one or ſeveral from the ſame ſurculus, red, ſhining, crooked, furniſhed at bottom with a naked oblong bulb, red at top, *fig.* 5.
CAPSULÆ ſuberectæ, tenues, oblongæ, acuminatæ, olivaceæ, nitidæ, *fig.* 6. *Calyptra* longa, acuminata, parum obliqua, *fig.* 7. *Operculum* longum, tenue, *fig.* 8. *Ciliæ* aurantiacæ, ſeu coccineæ ſpiræ modo contortæ, *fig.* 9.	CAPSULES nearly upright, ſlender, oblong, pointed, of an olive colour, and ſhining, *fig.* 6. *Calyptra* long, pointed, a little oblique, *fig.* 7. *Operculum* long, and ſlender, *fig.* 8, *Ciliæ* orange-coloured or ſcarlet, twiſted in the form of a ſcrew, *fig.* 9.

The moſs here repreſented is undoubtedly the *Bryum* figured by DILLENIUS, in his forty-fifth plate, forty-eighth figure. Neither LINNÆUS nor Mr. HUDSON make mention of it. We are convinced, however, from repeated obſervations, that it is a ſpecies perfectly diſtinct. It approaches very near to the *Bryum imberbe* and *unguiculatum*. From the former it differs in having the Antheræ or Capſules terminated by long twiſted ciliæ, and in having the peduncles always proceeding from the baſe of the ſurculus: this laſt character alſo ſtrikingly diſtinguiſhes it from the *unguiculatum*.

It is not unfrequent about *London*, eſpecially in the environs of *Charlton*, on walls, and barren hilly ground, with the *Bryum purpureum* and *cæſpititium*, and produces its fructifications in *December*, *January*, and *February*.

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Bryum barbatum.

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Phascum subulatum.

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Phascum acaulon.

PHASCUM ACAULON. COMMON PHASCUM.

PHASCUM *Lin. Gen. Pl.* CRYPTOGAMIA MUSCI.
Calyptra minima. *Operculum* nullum.
Raii Syn. Gen. 3. MUSCI.
PHASCUM *acaulon* anthera ſeſſili foliis ovatis acutis. *Lin. Syſt. Vegetab.* p. 794. *Sp. Pl.* 1570. *Fl. Suec.* 960.
PHASCUM *cuſpidatum* cauleſcens, foliis ovatis cuſpidatis patulis: terminalibus erectis conniventibus. *Schreber. de Phaſco.* t. 1. f. 1, 2.
SPHAGNUM acaulon foliis ovato-lanceolatis, pilo ariſtatis. *Haller. Hiſt.* 1726.
SPHAGNUM acaulon bulbiforme majus. *Dill. Muſc.* 251. t. 32. f. 11. *Raii Syn.* 105. *Lightfoot Fl. Scot.* p. 695. *Hudſon Fl. Angl.* p. 466. *Oeder Fl. Dan.* t. 249. f. 1.

PHASCUM SUBULATUM. HEATH PHASCUM.

PHASCUM ſubulatum acaule, anthera ſeſſili, foliis ſubulato-ſetaceis patulis. *Lin. Syſt. Vegetab.* p. 794. *Sp. Pl.* 1570.
PHASCUM *ſubulatum* cauleſcens, foliis lanceolato-linearibus patulis. *Schreber de Phaſco*, p. 80.
SPHAGNUM acaulon trichodes. *Haller. Hiſt.* n. 1727. *Dillen. Hiſt. Muſc.* 251. t. 32. f. 10. *Oeder Fl. Dan.* t. 249. *Lightfoot Fl. Scot.* p. 693. *Hudſon. Fl. Angl.* p. 466.

DILLENIUS, who drew the figures of his incomparable work on moſſes, without uſing glaſſes of any conſiderably magnifying power, or, perhaps, without attending ſo much to the minutiæ of the parts of fructification as the practice is at preſent, deſcribed theſe plants as *having no Calyptra*, and united them with the genus *Sphagnum*. LINNÆUS afterwards made a diſtinct genus of them, but without correcting the error of his predeceſſor. The following is the deſcription of the genus *Phaſcum*, which he gives in the 6th edition of the *Genera Plantarum*.

Maſculus flos ſubſeſſilis vel brevi pedunculo.
CAL. Calyptra nulla.
ANTHERA ovalis ore ciliato, tecta *operculo* acuminato.
RECEPT. *Apophyſis* nulla.
Femineus flos.

Several Botaniſts afterwards deſcribing and delineating the *calyptra*, LINNÆUS, in the 13th edition of his *Syſtema Naturæ*, publiſhed by MURRAY, under the title of *Syſtema Vegetabilium*, alters it thus:

ANTHERA operculata: ore ciliata. *Calyptra* caduca, minuta.

This generic deſcription, thus altered, is adopted by Mr. HUDSON, without any remarks on its inapplicability to the Engliſh *Phaſca*. He ſhould have informed us, that, however well the character might accord with any Foreign Phaſcum, the *Engliſh* ones, at leaſt both theſe here figured, which are the moſt common, have neither *Operculum* nor *Ciliæ*. Of this we are fully convinced from repeated examination; and have the pleaſure of having our experiments confirmed by the accurate and ingenious SCHREBER, who, in his moſt excellent *Monographia, Obſervationes de Phaſco*, has the following paſſages: "Suturam, qua plerorumque muſcorum "vaſcula infra apicem, ubi deinde operculum abſcedit, cinguntur, in nulla hujus generis ſpecie obſervare potui. "Operculum enim Phaſcis in univerſum omnibus deeſt, et vaſculum undique in extremum apicem uſque "clauditur, ſine ullius determinatæ aperturæ veſtigio, quamobrem compreſſum utcumque rumpi ſolet. Cilia "igitur in quocumque Phaſco fruſtra quærerentur."

Again, ſpeaking of the Capſule, he ſays: "*Pecten* in ea nullus adeſt nec ullam aperturæ cujuſdam determi- "natæ aut foraminis, emiſſioni contentorum inſervientis, veſtigium reperire unquam potui. Non enim ſponte "aperitur, ſed integra perſiſtit; donec maxima foliorum pars putruerit, quod in *Ph. pilifero* ſæpius obſervavi, "aut e foliis apertis integra elabitur."

This ſingular deficiency then, both of the Operculum and Ciliæ, forms, in our opinion, the beſt criterion by which to diſtinguiſh this genus of plants, and we have altered the generic character accordingly.

PHASCUM ACAULON.

THERE is no moſs more common on the moiſt banks about *London* than the *Phaſcuma acaulon;* but as it exhibits no appearance of fructification till in an advanced ſtate, and then only to the inquiſitive obſerver, it generally paſſes unnoticed. Mr. LIGHTFOOT gives a ſhort, but very expreſſive, deſcription of it, as follows: "The leaves, when young, connive "together, in the form of a ſmall oval bulb, "about one ſixth of an inch long, and hide "the capſule, which is oval and orange- "coloured at firſt, but when ripe fuſcous "and ſhining, and about the ſize of a millet "ſeed." We have repreſented the plant at *fig.* 1. as it uſually grows on the ground; *fig.* 2, 3. detached plants of their natural ſize; *fig.* 4. a plant magnified; *fig.* 5. a ſingle leaf magnified; *fig.* 6. the anthera or capſule magnified; *fig.* 7. the calyptra alſo magnified.

PHASCUM SUBULATUM.

THE *Phaſcum ſubulatum* is not ſo frequently met with as the *acaulon*, yet is not uncommon on heaths, in the ſand pits about *Charlton*, and on dry banks in a variety of places. They are both found in fructification from *December* to *January*.

In this ſpecies the capſule, though ſmaller, is much more diſtinctly ſeen, and its calyptra is viſible even to the naked eye. Like the other, it varies much in ſize, as alſo in the length, of its peduncle. Mr. LIGHTFOOT conſiders it as the leaſt of our *Engliſh* plants; but Mr. DICKSON, of *Covent-Garden*, who may juſtly be called *maximus in minimis*, has diſcovered a Phaſcum, the *ſerratum* of SCHREBER, which is certainly ten times ſmaller. *Fig.* 1. repreſents the ſubulatum as it uſually grows; *fig.* 2, 3. detached plants; *fig.* 4. a plant magnified; *fig.* 5. a ſingle leaf magnified; *fig.* 6. the capſule; *fig.* 7. the calyptra magnified.

OPHRYS SPIRALIS. LADIES TRACES.

OPHRYS *Lin. Gen. Pl.* GYNANDRIA DIANDRIA.

Nectarium ſubtus ſubcarinatum.

Raii Syn. Gen. 21. HERBÆ RADICE BULBOSA PRÆDITÆ.

OPHRYS *ſpiralis* bulbis aggregatis oblongis, caule ſubfolioſo, floribus ſecundis, nectarii labio indiviſo crenato. *Lin. Syſt. Vegetab.* p. 677. *Sp. Pl.* 1340.

EPIPACTIS bulbis cylindricis, ſpica ſpirali, labello crenulato. *Haller. Hiſt.* n. 1294.

SERAPIAS *ſpiralis.* *Scopoli Flor. Carn.* n. 1125.

ORCHIS ſpiralis alba odorata. *I. B.* II. 769.

TRIORCHIS alba odorata minor, atque etiam major. *Bauhin. Pin.* 84.

TRIORCHIS. *Ger. emac.* 218. *Parkins.* 1354 *Raii Syn.* p. 378. Triple Ladies Traces. *Hudſon Fl. Angl.* p. 388.

RADIX fit uno, duobus, tribus, quatuorve bulbis, oblongis, acuminatis, villoſis.	ROOT conſiſts of one, two, three, or four oblong, pointed, villous bulbs.
FOLIA radicalia quatuor, et ultra, ſupra terram expanſa, ovata, acuta, hinc convexa, inde cava, ſemunciam lata, ad lentem punctata, obſolete nervoſa.	LEAVES next the root four, or more, ſpread out on the ground, ovate, pointed, convex on one ſide, and concave on the other, half an inch in breadth, dotted when magnified, and faintly ribbed.
SCAPUS ſpithamæus, folioſus, foliis vaginantibus, pubeſcentibus, margine membranaceis.	STALK ſix or ſeven inches high, leafy, leaves ſheathy, downy, and membranous at the edge.
FLORES ex albo-vireſcentes, odorati, quindecim et ultra, *ſpiræ modo diſpoſiti*.	FLOWERS of a greeniſh white colour, fragrant, fifteen and more in number, *ſpirally diſpoſed.*
BRACTÆA oblonga, acuminata, cava, villoſa, germinis cum dimidio floris longitudine. *fig.* 1.	FLORAL-LEAF oblong, pointed, hollow, villous, of the length of the germen, and half the flower, *fig.* 1.
PETALA quinque, alba, ſubæqualia, villoſula, tria ſuperiora ſubcoadunata, recta, duo lateralia carinata, lanceolata, *fig.* 2, 3.; labellum *Nectarii* obtuſum, crenulatum, intus viridulum, concavum, *fig.* 4. auct. *fig.* 5.	PETALS five, white, nearly equal, ſomewhat villous, the three uppermoſt very ſlightly connected together, ſtraight, the two ſide ones keeled and lanceolate, *fig.* 2, 3.; the lip of the *Nectary* blunt, finely notched, green within and hollow, *fig.* 4. magnified, *fig.* 5.
GERMEN ſeſſile, ovatum, lineis duabus lateralibus extantibus notatum. *fig.* 6.	GERMEN ſeſſile, ovate, marked with two protuberant ſide lines. *fig.* 6.

The Rev. Dr. GOODENOUGH, of *Ealing*, kindly communicated to us this plant, having found it ſparingly on *Hanwel Heath*, near *Ealing*: though ſcarce with us, in many parts of *England*, eſpecially the more northern, it is not uncommon. It grows in paſtures, both dry and moiſt, and does not particularly affect a chalky ſoil. In the garden it grows more readily than moſt of its tribe, and flowers later, its uſual month of blowing being *September*.

The protuberant germina, placed regularly one above another, ſomewhat reſemble plaited hair, whence, perhaps, its name of *Ladies Traces*. The flowers are fragrant, and, by the ſpiral manner in which they grow, form a curious ſpecific character.

Baron HALLER, who has taken infinite pains with the plants of this tribe, has not very happily expreſſed this ſpecies; his artiſt appears to have had an unnatural ſpecimen to copy from.

The Ladies Traces varies much in ſize as well as in the number of its roots.

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Ophrys spiralis.

Chærophyllum sylvestre.

CHÆROPHYLLUM SYLVESTRE. COMMON COW-PARSLEY.

CHÆROPHYLLUM. *Lin. Gen. Pl.* PENTANDRIA DIGYNIA.
Involucr. reflexum, concavum. *Petala* inflexo-cordata. *Fructus* oblongus, lævis.
Raii Syn. Gen. 11. UMBELLIFERÆ HERBÆ.
CHÆROPHYLLUM *ſylveſtre* caule lævi ſtriato, geniculis tumidiuſculis. *Lin. Syſt. Vegetab.* p. 238. *Sp. Pl.* p. 369. *Fl. Suec.* n. 257.
CEREFOLIUM foliis acute dentatis triplicato-pinnatis, glabris, nervis hirſutis. *Halle Hiſt.* n. 748.
CHÆROPHYLLUM *ſylveſtre. Scopoli Fl. Carn.* n. 366.
MYRRHIS ſylveſtris ſeminibus lævibus. *Bauhin. Pin.* 170.
CICUTARIA vulgaris. *Dod. Pempt.* 701.
MYRRHIS ſylveſtris. *Parkinſon*, 935.
CICUTARIA alba Lugdunenſis. *Ger. emac.* 1038. *Raii Syn.* p. 207. Wild Chervil. *Hudſon. Fl. Angl.* p. 124. *Lightfoot Fl. Scot.* p. 167.

RADIX perennis, craſſitie digiti intermedii, ad baſin ſæpius ramoſa, extus pallide fuſca, intus albida, ſuccum vix lacteum fundens.

CAULIS bipedalis et ultra, erectus, craſſitie digiti minimi, fiſtuloſus, ſulcatus, plerumque villoſus, et ſæpius purpuraſcens, ramoſus, geniculatus, geniculis paululum incraſſatis; rami ſuberecti, minus pubeſcentes.

FOLIA radicalia multiplicato-pinnata, ſæpe ampliſſima; Coſtæ hirſutæ, fiſtuloſæ, dorſo acute angulatæ, antice canaliculatæ, ortæque ex vagina brevi ſtriataque, pinnulæ lanceolatæ, acutæ, ſerrato-inciſæ, plerumque hirſutæ; caulina et ramea ſucceſſive minora minuſque diviſa, cæterum ſimilia, ſuperiora ſæpe oppoſita aut terna cum totidem ramis axillaribus.

UMBELLÆ planiuſculæ, nec denſæ, nec plantæ ratione amplæ, ante antheſin nutantes, radiis compoſitæ a ſeptem ad octodecim, gracilibus, teretibus et glabris.

INVOLUCRUM univerſale nullum, partiale pentaphyllum et ultra, foliolis acuminato-ovatis, concavis, glabris, ad oras ſubciliatis, umbellulis duplo brevioribus, tandem reflexis.

FLORES inodori, pauci ſteriles.

COROLLA: PETALA plana, et obverſe ovata, albida, centralium floſculorum ſubæqualia, exteriorum vero extimum majus, et ſubcordato emarginatum. *fig.* 1, 2, 3.

STAMINA: FILAMENTA quinque albida, brevia et caduca. ANTHERÆ ſubrotundæ, didymæ, flaveſcentes. *fig.* 4.

PISTILLUM: GERMEN inferum, turbinatum, utrinque compreſſiuſculum, lucidum; glandula nectarifera coronatum. STYLI duo, albi, parviuſculi. STIGMATA ſimplicia. *fig.* 5, 6.

SEMINA duo, oblonga, antice ſulcata, cæterum teretia, lævia, nitida, nigricantia, inodora, ſapore vix ullo. *fig.* 7.

ROOT perennial, the thickneſs of the middle finger, moſt commonly branching out from the baſe, externally of a pale-brown colour, internally whitiſh, full of a juice which can ſcarcely be called milky.

STALK two feet high and upwards, upright, the thickneſs of the little finger, hollow, grooved, generally villous, and moſt commonly purpliſh, branched, jointed, joints ſomewhat thickened; branches nearly upright, leſs hoary than the ſtalk.

LEAVES next the root many times pinnated, often very large; the Ribs hirſute, fiſtulous, forming a ſharp angle on the back, hollow in front, and ariſing from a ſhort ſtriated ſheath, the ſmall pinnæ lanceolate, pointed, deeply and irregularly ſerrated, generally hirſute, the leaves of the ſtalk and branches ſucceſſively ſmaller, and leſs divided, in other reſpects ſimilar, the upper ones often oppoſite or growing three together, with as many axillary branches.

UMBELLS flattiſh, neither thick nor large for the ſize of the plant, drooping before the expanſion of the flowers, compoſed of ſeven to eighteen radii, which are ſlender, round, and ſmooth.

INVOLUCRUM the general one wanting, the partial one compoſed of five leaves or more, which are ovate, pointed, hollow, ſmooth, ſomewhat hairy on the edges, twice as ſhort as the ſmall umbells, finally turned back.

FLOWERS ſcentleſs, a few of them barren.

COROLLA: PETALS flat, inverſely ovate, whitiſh, thoſe of the central flowers nearly equal, but the outermoſt of the outer ones largeſt, ſomewhat heart-ſhaped and nicked. *fig.* 1, 2, 3.

STAMINA: FILAMENTS five, whitiſh, ſhort, and deciduous. ANTHERÆ nearly round, double, and yellowiſh. *fig.* 4.

PISTILLUM: GERMEN placed beneath the corolla, broadeſt at top, flattiſh on both ſides, ſhining, crowned with a nectariferous gland. STYLES two, white and ſmall. STIGMATA ſimple. *fig.* 5, 6.

SEEDS two oblong, with a groove in the fore-part, round, ſmooth, ſhining, blackiſh, without ſcent, and almoſt taſteleſs. *fig.* 7.

In many parts of the kingdom this plant is well known by the name of *Cow-parſley*, a term we adopt in preference to *Cow-weed*, or *wild Chervil*; the former being applicable to the *Cow-parſnep* alſo, and the latter more properly belonging to the *Scandix Cerefolium* and *odorata*.

LINNÆUS's ſpecific character of this *Chærophyllum* is only applicable to the upper part of the plant: the lower part of the ſtalk, by which it is moſt obviouſly diſtinguiſhed, is ſtrongly grooved, and covered with numerous ſhort hairs.

It is one of the moſt common, as well as the earlieſt in bloſſom, of our *umbelliferi*, flowering in warm ſituations in *April*, and generally with us in *May*. It grows chiefly in orchards, paſtures, and under hedges. In ſheltered ſituations it produces a large crop of early foliage; hence it has been recommended by ſome writers on agriculture as worthy the attention of the Farmer, more eſpecially as cows are ſaid to be fond of it. To rabbits it is a luxurious treat, as thoſe who keep them pretty generally know. In time of ſcarcity the young leaves, in ſome parts of the kingdom, are uſed as a pot-herb: the *boiled roots* are ſaid to have a poiſonous quality, perhaps without any foundation.

LINNÆUS remarks, in his *Flora Suecica*, that its preſence indicates a fertile ſoil; and that its flowers are capable of communicating a yellow dye to woollen cloth.

BUNIUM BULBOCASTANUM. EARTH-NUT.

BUNIUM *Lin. Gen. Pl.* PENTANDRIA DIGYNIA.

Corolla uniformis. *Umbella* conferta. *Fructus* ovatus.

Raii Syn. Gen. 11. UMBELLIFERÆ HERBÆ.

BUNIUM *Bulbocaſtanum.* *Lin. Syſt. Vegetab.* p. 229. *Sp. Pl.* p. 349.

BULBOCASTANUM. *Haller Hiſt.* n. 783.

BULBOCASTANUM. *I. B.* III. 2. 30.

BULBOCASTANUM majus folio apii. *Bauhin. Pin.* 162.

BULBOCASTANUM majus et minus. *Ger. emac.* 1065.

NUCULA terreſtris major. *Parkinſ.* 893. *Raii Syn.* p. 209. Earth-Nut, Kipper-Nut, Pig-Nut, *Hudſon. Fl. Angl. ed.* 2. p. 122. *Lightfoot Fl. Scot.* p. 156. *Oeder. Fl. Dan.* t. 220.

RADIX perennis, tuberoſa, extus caſtanei coloris, intus alba, ſolida, fibras tum ab imo tum a lateribus promens tenues, guſtu ſubdulci grato, profunde in terra deliteſcente.

CAULIS pedalis, ad bipedalem, erectus, teres, firmulus, craſſitie pennæ coracis, ſubſtriatus, glaber, penitus viridis, ramoſus.

FOLIA radicalia longe petiolata, caulina ſeſſilia, omnibus tenuiſſime diviſis, fœniculi modo, ſaturate viridibus, marginibus foliorum ad lentem aculeato-ciliatis, *fig.* 7. *auct.* *Spatha* brevis, ſulcatus, lævis, margine membranaceâ, albidâ.

UMBELLÆ plures, *univerſalis* multiplex radiis ſeptem ad duodecim, *partialis* breviſſima, conferta, radiis circiter duodecim.

INVOLUCRUM *univerſale* polyphyllum, lineare, breve, ſæpe nullum; *partiale* ſetaceum, longitudine umbellulæ, aliquando nullum. *Perianthium proprium* vix manifeſtum.

COROLLA univerſalis uniformis, floſculi plerique fertiles; *propria* Petalis quinque, inflexo-cordatis æqualibus. *fig.* 2.

STAMINA: FILAMENTA quinque alba, ſubulata, corolla longiora, decidua. ANTHERÆ ſimplices, flaveſcentes. *fig.* 3.

PISTILLUM: GERMEN oblongum, inferum, viride. STYLI duo albi, ſuberecti. STIGMATA obtuſa. *fig.* 4, 5.

SEMINA duo, oblongo-ovata, hinc convexa inde plana, glabra, ſubaromatica. *fig.* 6, 7.

ROOT perennial, tuberous, on the outſide of a cheſnut colour, within white, ſolid, putting forth ſlender fibres from the ſides as well as the bottom, of an agreeable ſweetiſh taſte, lying deep in the ground.

STALK from one to two feet high, upright, round, ſtiffiſh, the thickneſs of a crow-quill, ſlightly ſtriated, ſmooth, throughout of a green colour, and branched.

LEAVES from the root ſtanding on long foot-ſtalks, thoſe of the ſtalk ſeſſile, all of them very finely divided like fennel, the ſmall leaves edged with prickly hairs, *fig.* 1. *magn.* *Sheath* ſhort, grooved, ſmooth, the edge membranous and whitiſh.

UMBELLS ſeveral, the *general* one compoſed of many rays from ſeven to twelve; the *partial* one very ſhort, the rays about twelve and cloſe.

INVOLUCRUM: the *general* one compoſed of many leaves, linear, ſhort, often wanting; the *partial* one ſetaceous, the length of the ſmall umbell, often wanting. *Partial Perianthium* ſcarcely manifeſt.

COROLLA: general Corolla uniform, moſt of the flowers fertile; individual one compoſed of five Petals, heart-ſhaped, bent in at top, and equal. *fig.* 2.

STAMINA: five FILAMENTS of a white colour, tapering, longer than the corolla, deciduous. ANTHERÆ ſimple and yellowiſh. *fig.* 3.

PISTILLUM: GERMEN oblong, beneath the corolla, of a green colour. STYLES two, white, nearly upright. STIGMATA blunt. *fig.* 4, 5.

SEEDS two, of an oblong-ovate ſhape, convex on one ſide and flat on the other, ſmooth, and ſomewhat aromatic. *fig.* 6, 7.

Children are frequently in the practice of digging up and eating the knobby roots of this plant, which, by ſome, are ſuppoſed to reſemble the cheſnut in its taſte, whence its name of *Bulbocaſtanum.* Pigs alſo ſeek for it with avidity, from which circumſtance it has alſo obtained the name of *Pig-Nut.*

Few of our Umbelliferi have the characteriſtic marks which diſtinguiſh the Bunium; the principal of which are its knobbed root, and finely divided fennel-like leaves. The one which approaches the neareſt to it is the *Oenanthe fiſtuloſa,* eſpecially when growing on ditch banks, where it is frequently thrown when the ditches are cleanſed, or when it is cultivated in gardens; the roots, in ſuch ſituations, are ſo ſimilar to thoſe of the Bunium, as to deceive even good judges. The radical leaves of the plant are alſo finely divided; it would be no wonder, therefore, if they ſhould be miſtaken for the Earth-Nut.

A paper was publiſhed, about a year ago, in one of the Magazines, the *London,* if I miſtake not, in which the roots of the *Oenanthe crocata,* well known for their poiſonous effects, were ſaid to have been eaten for thoſe of this plant. We ſuſpect, however, from various circumſtances, that they were the roots of the *Oenanthe fiſtuloſa.* It is our intention to make a more minute inquiry into this matter, and give our reaſons more at large for this ſuſpicion, when we figure that ſpecies.

The Earth-Nut with us grows chiefly in woods, paſtures, and orchards, and flowers in *June.*

Bunium Bulbocastanum.

Arenaria trinervia.

ARENARIA TRINERVIA. PLANTAIN-LEAVED CHICKWEED.

ARENARIA *Lin. Gen. Pl.* DECANDRIA TRIGYNIA.

Cal. 5-phyllus, patens. *Petala* 5, integra. *Capſ.* 1, locularis, polyſperma.

Raii Syn. Gen. 24. HERBÆ PENTAPETALÆ VASCULIFERÆ.

ARENARIA *trinervia* foliis ovatis acutis petiolatis nervoſis. *Lin. Syſt. Vegetab.* p. 353. *Sp. Pl.* p. 605. *Fl. Suec.* n. 397.

ALSINE foliis ovato-lanceolatis, trinerviis. *Haller. Hiſt.* n. 878.

ALSINE *Plantaginis folio. I. B.* III. 364. *Raii Syn.* p. 349. Plantain-leaved Chickweed. *Hudſon Fl. Angl. ed.* 2. p. 191. *Lightfoot Fl. Scot.* p. 230. *Oeder Fl. Dan.* t. 429.

RADIX annua, tenuiſſima, fibroſa, albida.	ROOT annual, very ſlender, fibriſh, and whitiſh.
CAULES plures, ſpithamæi, pedales, et ultra, debiles, teretes, undique pubeſcentes, geniculati, ramoſiſſimi.	STALKS ſeveral, a ſpan, a foot, or more in length, weak, downy all round, jointed, and very much branched.
FOLIA oppoſita, ovata, acuta, pallide viridia, trinervia, integerrima, margine nervisque minutim ciliatis, ſupremis ſeſſilibus, inferioribus petiolatis, crebioribus, minoribus.	LEAVES oppoſite, ovate, pointed, of a pale green colour, three-ribb'd, entire, the edge and ribs finely fringed with hairs, the uppermoſt ſeſſile, the lowermoſt ſtanding on foot-ſtalks, more numerous and ſmaller.
PETIOLI ſubalati, marginibus piloſis.	LEAF-STALKS ſomewhat winged, the edges hairy.
FLORES alterni, ſolitarii, e dichotomia caulis.	FLOWERS alternate, ſolitary, proceeding from the forking of the ſtalk.
PEDUNCULI teretes, pubeſcentes, primo erecti, demum horizontaliter extenſi, apice ſubinflexo, et paululum incraſſato.	FLOWER-STALKS round, downy, at firſt erect, finally horizontally extended, the tip ſomewhat bent in, and a little thickened.
CALYX: PERIANTHIUM pentaphyllum, foliis ovato-acuminatis, carinatis, pubeſcentibus, corolla longioribus. *fig.* 1.	CALYX: a PERIANTHIUM of five leaves, which are ovate, running out to a point, keeled, downy, longer than the corolla. *fig.* 1.
COROLLA: PETALA quinque, parva, alba, obovata, integra. *fig.* 2.	COROLLA: five PETALS, ſmall, white, inverſely ovate and entire. *fig* 2.
STAMINA: FILAMENTA decem, longitudine corollæ, alba, filiformia. ANTHERÆ minutæ, flavæ. *fig.* 3.	STAMINA: ten FILAMENTS, the length of the corolla, white, filiform. ANTHERÆ very ſmall, and yellow. *fig.* 3.
PISTILLUM: GERMEN ovatum. STYLI tres, longitudine germinis. STIGMATA obtuſiuſcula. *fig.* 4.	PISTILLUM: GERMEN ovate. STYLES three, the length of the germen. STIGMATA bluntiſh. *fig.* 4.
PERICARPIUM: *Capſula* ſubconica, tecta, unilocularis.	SEED-VESSEL: a *Capſule* of a ſhape ſomewhat conic, covered by the calyx, and having one cavity.
SEMINA plurima, ſubreniformia, planiuſcula, *glaberrima, nigra.*	SEEDS numerous, ſomewhat kidney-ſhaped, flattiſh, *very ſmooth,* and *black.*

There exiſts a conſiderable ſimilarity betwixt the preſent plant and the common Chickweed; the attentive obſerver will, however, find them to differ very materially.

As a principal part of the profeſſed deſign of this work is to remove, as much as poſſible, every difficulty attending an inveſtigation of the Britiſh plants, we ſhall point out thoſe differences which have appeared to us the moſt ſtriking in comparing the two together. The common Chickweed, as its name imports, is found almoſt every where, as well in expoſed as in ſhady ſituations; this, on the contrary, is found with us only in woods, and on the ſhady banks ſurrounding them, and, compared with the other, may be conſidered rather as a ſcarce plant. The common Chickweed flowers in *March* and *April;* this produces its bloſſoms in *May* and *June.* The common Chickweed has a row of hairs running down each ſide of the ſtalk; this is uniformly covered with very ſhort hairs, ſcarcely diſcernible. The former has a procumbent ſtalk; this grows erect. In the former the leaves are not diſtinguiſhed by any veins or ribs; this, on the contrary, has three ſtrong ones, which give them ſomewhat the appearance of thoſe of Plantain, whence its name. In the former the petals are bifid; in this they are entire. The ſeeds alſo afford another very ſtriking difference: in the common Chickweed they are brown and rough; while thoſe of the *trinervia* are black, perfectly ſmooth, and ſhining.

We know of no particular uſe to which this diminutive plant is applicable.

CARDAMINE HIRSUTA. HAIRY LADIES-SMOCK.

CARDAMINE *Lin. Gen. Pl.* TETRADYNAMIA SILIQUOSA.

Siliqua elaſtice diſſiliens valvulis revolutis. *Stigma* integrum. *Cal.* ſubhians.

Raii Syn. Gen. 21. HERBÆ TETRAPETALÆ SILIQUOSÆ ET SILICULOSÆ.

CARDAMINE foliis pinnatis, floribus tetrandris. *Lin. Syſt. Vegetab. p.* 497. *Sp. Pl. p.* 915. *Fl. Suec. n.* 587.

CARDAMINE foliis pinnatis hirſutis, pinnis ſubrotundis, ſtaminibus quaternis. *Haller Hiſt.* 472.

CARDAMINE *hirſuta.* *Scopoli Fl. Carn. n.* 817. *t.* 38.

NASTURTIUM aquaticum minus. *Bauh. Pin.* 104.

CARDAMINE impatiens altera hirſutior. *Raii Syn. p.* 300. The leſſer Hairy, impatient Cuckow-Flower or Ladies-Smock.

CARDAMINE foliis pinnatis, foliolis radicalibus ſubrotundo-cordatis; caulinis ovatis dentatis petiolatis. *Hudſon. Fl. Ang. ed.* 2. *p.* 295. *Lightfoot Fl. Scot. p.* 348.

RADIX annua, fibroſa, fibris albidis.

CAULIS ſpithamæus, et ultra pro ratione loci, in foſſis humidis reperitur etiam ſeſquipedalis, ſolidus, erectus, flexuoſus, ſulcato-anguloſus, prope baſin purpureus, et ſæpius hirſutiſſimus, ſuperne fere glaber, ramoſus, ramoſiſſimus etiam occurrit.

FOLIA radicalia plurima, in orbem poſita, pinnata, foliolis petiolatis, rotundato angulatis, plerumque quinque lobatis, hirſutis, punctis prominulis ſcabriuſculis, lobis inæqualibus, nunc obtuſis, nunc acutis, caulina anguſtiora et magis profunde inciſa, lobis paucioribus.

FLORES parvi, albi, primo vere tantum, tetrandri.

CALYX: PERIANTHIUM tetraphyllum, foliolis ovato-oblongis, obtuſis, concavis, deciduis, pilis paucis albidis inſtructis, *fig.* 1.

COROLLA: PETALA quatuor, alba, calyce duplo fere longiora, patentia, integerrima, obtuſa, *fig.* 2.

STAMINA: FILAMENTA plerumque ſex, quorum duo, breviora, alba. ANTHERÆ minimæ, luteſcentes, *fig.* 3.

PISTILLUM: GERMEN oblongum, tenue, ſtaminibus paulo brevior. STIGMA capitatum, *fig.* 4.

PERICARPIUM: *Siliqua* erecta, uncialis, ſubcompreſſa, bivalvis, elaſtice diſſiliens, valvulis revolutis, *fig.* 5.

SEMINA duodecim circiter, ſuborbiculata, compreſſa, glabra, e flavo fuſca, *fig.* 6.

ROOT annual and fibrous, the fibres whitiſh.

STALK about a ſpan high, or more, according to the ſituation in which it grows; in wet ditches it is ſometimes found even a foot and a half in height, ſolid, upright, crooked, grooved or angular, purple near the baſe, and moſt commonly very hairy, above nearly ſmooth, branched, ſometimes very much ſo.

LEAVES next the root numerous, forming a circle, pinnated, the ſmall leaves ſtanding on footſtalks, round yet angular, generally divided into five lobes, hirſute, roughiſh with little prominent points, the lobes unequal, ſometimes blunt and ſometimes pointed; thoſe of the ſtalk narrower, and more deeply indented, with fewer lobes.

FLOWERS ſmall, and white, early in the ſpring having only four ſtamina.

CALYX: a PERIANTHIUM of four leaves, of an ovate, oblong ſhape, obtuſe, hollow, deciduous, furniſhed with a few white hairs, *fig.* 1.

COROLLA: four white PETALS, almoſt twice the length of the calyx, ſpreading, entire and obtuſe, *fig.* 2.

STAMINA: for the moſt part ſix FILAMENTS, of which two are ſhorter than the reſt, of a white colour. ANTHERÆ very ſmall and yellowiſh, *fig.* 3.

PISTILLUM: GERMEN oblong, ſlender, a little ſhorter than the ſtamina. STIGMA forming a ſmall head, *fig.* 4.

SEED-VESSEL: an upright *Pod*, about an inch in length, ſomewhat flattened, of two valves, which burſt with an elaſtic force, and roll back, *fig.* 5.

SEEDS about twelve in number, nearly round and flattened, ſmooth, and of a yellowiſh-brown colour, *fig.* 6.

We were inclined to believe with our ingenious friend Mr. LIGHTFOOT, that the *Cardamine hirſuta* and *parviflora* were diſtinct ſpecies; but repeated obſervation and culture have convinced us, that they are both the ſame, varying only in ſize, in hairineſs, and in the number of their ſtamina.

In wet ſituations, where the ſoil is luxuriant, it grows a foot or two in height, and loſes in a great degree its hairineſs; in expoſed places it ſeldom reaches more than ſix or eight inches, and is generally much more hairy; and, when it grows ſingly, much more branched. The ſame plant, early in the ſpring, when the weather is cold, has only four ſtamina; as the ſummer advances, it has conſtantly ſix. The lobes of the radical leaves vary much in ſhape, and are frequently much rounder than the figure repreſents.

This ſpecies is by no means general about *London*, but abounds in particular places; as by *Chelſea* water-works, in wet ditches about *Hampſtead*, *Highgate*, and elſewhere.

It flowers in *April* and *May*. In the garden, if the ſituation in which it is ſown be ſhady, and the ſeaſon not uncommonly dry, it continues flowering and ſeeding during the whole of the ſummer.

According to Mr. LIGHTFOOT, the young leaves are a good ingredient in a ſalad, and may eaſily be obtained in the ſpring, when Muſtard and Creſs are not to be had.

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Hieracium Pilosella.

HIERACIUM PILOSELLA. MOUSE-EAR.

HIERACIUM *Lin. Gen. Pl.* SYNGENESIA POLYGAMIA ÆQUALIS.

Recept. nudum. *Cal.* imbricatus, ovatus. *Pappus* ſimplex, ſeſſilis.

Raii Syn. Gen. 6. HERBÆ FLORE COMPOSITO NATURA PLENO LACTESCENTES.

HIERACIUM *Piloſella* foliis ovatis integerrimis tomentoſis, ſtolonibus repentibus, ſcapo unifloro. *Lin. Syſt. Vegetab. p.* 597. *Sp. Pl. p.* 1125. *Fl. Suec. n.* 697.

HIERACIUM caule unifloro, ſtolonibus reptantibus, foliis petiolatis, ovatis, longe piloſis, ſubtus tomentoſis. *Haller. Hiſt. n.* 53.

HIERACIUM *Piloſella. Scopoli Fl. Carniol. n.* 966.

PILOSELLA major repens hirſuta. *Bauh. Pin.* 262.

PILOSELLA minor vulgaris repens. *Parkinſon* 690.

PILOSELLA repens. *Ger. emac.* 638. *Raii Syn. p.* 170. Common creeping Mouſe-Ear. *Hudſon Fl. Angl. p.* 343. *Lightfoot Fl. Scot. p.* 436.

RADIX perennis, fibroſa, fibris, pallide fuſcis.

FOLIA petiolata, ovata, ſæpe oblonga, integerrima, ſuperne virentia, ſcabriuſcula, inferne alba, tomentoſa, utrinque pilis longis obſita, e centro foliorum ad baſin caulis, oriuntur ſtolones teretes, repentes, hirſuti, folioſi, foliis utplurimum lanceolatis.

SCAPUS: ex una planta ſeu roſula exſurgit ſcapus plerumque ſolitarius, palmaris, ſpithamæus et ultra, erectus teres, nudus, fiſtuloſus, inferne piloſus, ſuperne hirſutus, uniflorus.

FLORES pallide lutei, ſeu ſulphurei, extimis floſculis inferne purpuraſcentibus.

CALYX communis imbricatus, ſquamis pluribus, linearibus, valde inequalibus, *fig.* 1, 2, hirſutis, pilis nigricantibus, ad lentem globiferis.

COROLLA compoſita, imbricata, uniformis; *Corollulis* hermaphroditis, numeroſis, æqualibus; *propria* monopetala. *Tubus* pappo longior, albus, lanatus. *Limbus* planus, quinquedentatus, longitudine tubi, *fig.* 3, 4.

STAMINA: FILAMENTA quinque capillaria, breviſſima. ANTHERÆ in tubum cylindricum, flavum coalitæ, *fig.* 5.

PISTILLUM: GERMEN oblongum. STYLUS filiformis, longitudine ſtaminum. STIGMATA duo, revoluta, *fig.* 6.

SEMEN oblongum, nigricans, ſtriatum. *Pappus* ſemine duplo longior, ſeſſilis, ſimplex, *fig.* 7, 8.

ROOT perennial, fibrous, the fibres of a pale brown colour.

LEAVES ſtanding on foot-ſtalks, ovate, often oblong, perfectly entire, on the upper ſide green and roughiſh, on the under ſide white and downy, on both ſides beſet with long hairs, from the centre of the leaves, at the baſe of the ſtalk, ſpring one or more round, creeping, hirſute, leafy runners, with leaves for the moſt part lanceolate.

STALK: from a ſingle plant or offſet ariſes generally one ſolitary ſtalk, from four to ſeven inches or more in height, upright, round, naked, hollow, below hairy, above hirſute, ſupporting a ſingle bloſſom.

FLOWERS of a pale yellow, or ſulphur colour, the outermoſt florets purpliſh on the under ſide.

CALYX: the common Calyx imbricated, the ſcales numerous, linear, very unequal, *fig.* 1, 2. hirſute, the hairs blackiſh, and when magnified globular at the extremity.

COROLLA compound, imbricated and uniform, the *Florets* hermaphrodite, numerous, equal, and monopetalous. The *Tube* longer than the pappus, white and woolly. The *Limb* flat, having five teeth, the length of the tube, *fig.* 3, 4.

STAMINA: five capillary FILAMENTS, very ſhort. ANTHERÆ united in a cylindrical, yellow tube, *fig.* 5.

PISTILLUM: GERMEN oblong. STYLE filiform, the length of the ſtamina. STIGMATA two, rolled back, *fig.* 6.

SEED oblong, blackiſh, ſtriated. *Down* twice the length of the ſeed, ſeſſile, and ſimple, *fig.* 7, 8.

The ancient Botaniſts fancied ſome ſimilitude betwixt the hairy leaves of this plant and a mouſe's ear, whence its name.

Of the whole genus of Hawk-weed this is the moſt univerſally common in this country. It delights in dry and expoſed ſituations, which are frequently rendered barren by long continued drought; the ſunny bank, the lifeleſs wall, and arid heath, are often enamelled with its lively flowers, which appear in *May* and *June*, and frequently produce a ſecond crop late in the ſummer.

It has been received into the ſhops under the name of *Auricula muris*, and conſidered as poſſeſſing an aſtringent quality; but at preſent, in this reſpect, is but little regarded.

SIMON PAULI diſcovered on its roots ſmall tubercles, which he conſidered as the eggs of an unknown inſect; theſe have ſince proved to be a *Coccus (Coccus Piloſella, Lin.)* nearly related to the *Coccus polonicus*, an inſect uſed in dying. We have not heard of its having been obſerved here.

VALERIANA DIOICA. MARSH VALERIAN.

VALERIANA *Linnæi Gen. Plant.* TRIANDRIA MONOGYNIA.

Cal. o *Cor.* 1. petala, baſi hinc gibba, ſupera. *Sem.* 1.

VALERIANA *dioica* floribus triandris dioicis foliis pinnatis integerrimis. *Lin. Syſt. Vegetab. Sp. Pl. p.* 44. *Fl. Suec. n.* 35.

VALERIANA foliis radicalibus petiolatis ovatis; caulinis pinnatis, ſexu diſtincta. *Haller. hiſt.* 208.

VALERIANA *dioica. Scopoli Fl. Carn. n.* 40.

VALERIANA paluſtris minor. *Bauhin. p.* 164.

VALERIANA minor. *Ger. emac.* 1075.

VALERIANA ſylveſtris minor. *Park.* 122.

Raii Syn. p. 200. Small wild Valerian, or Marſh Valerian. *Hudſon. Fl. Angl. ed.* 2. *p.* 12. *Lightfoot Fl. Scot. p.* 85.

RADIX perennis, geniculata, repens, craſſitie pennæ coracis, albida, rubore aliquando tincta, odore ſubaromatico valerianæ ſylveſtris.

CAULIS pedalis aut ſeſquipedalis, erectus, ſimplex, tetragonus, ſtriatus, lævis; rami pauci, ſtriati.

FOLIA oppoſita, radicalia integerrima, ovata obtuſa, caulina pauca, pinnatifida, pinnis duodecim circiter, venoſis, obtuſe ſerratis.

FLORES ſubcorymboſi, rubelli, dioici, femineis multo minoribus; *fig.* 1. flor. femin. magn. nat. *fig.* 2. flor. maſc.

BRACTEÆ plurimæ, lanceolatæ, floribus ſubjectæ.

FLOS FEMIN.

CALYX vix ullus, margo ſuperus, *fig.* 7.

COROLLA monopetala, tubus a latere inferiore gibbus, nectariferus; *limbus* quinquefidus, laciniis obtuſis, ſubæqualibus; antherarum rudimenta intra tubum cernantur.

PISTILLUM: GERMEN inferum, ovatum, compreſſum, ſulcatum, longitudine fere corollæ; STYLUS albus, ſuperne paulo incraſſatus, corolla paulo longior, obliquus; STIGMA trifidum, *fig*, 6. 7, 8, 9.

SEMEN ovato-oblongum, pallide fuſcum, hinc carinatum, illinc trinerve, pappo piloſo coronatum, *fig.* 11, 12, 13.

FLOS MASC.

CALYX et corolla ſicut in fem, *fig.* 2.

STAMINA: FILAMENTA tria, filiformia, corolla longiora; ANTHERÆ albæ; ſeu pallide rubentes, *fig.* 5. Piſtillum imperfectum in centro floris, *fig.* 10.

ROOT perennial, jointed, creeping, the thickneſs of a crow-quill, white, ſometimes tinged with red, having nearly the ſame aromatic ſmell as the wild valerian.

STALK a foot or a foot and a half high, upright, unbranched, four-cornered, ſtriated and ſmooth; branches few and ſtriated.

LEAVES oppoſite, the radical ones entire, ovate, obtuſe, thoſe of the ſtalk few, pinnatifid, pinnæ about twelve in number, veiny, and obtuſely ſerrated.

FLOWERS forming a kind of corymbus, of a pink colour, and dioicous, the female flowers much the ſmalleſt; *fig.* 1. a female flower of its natural ſize; *fig.* 2. a male flower.

BRACTEÆ numerous, lanceolate, placed beneath the flowers.

FEMALE FLOWER.

CALYX ſcarce any, being only a prominent rim ſurrounding the top of the germen, *fig.* 7.

COROLLA monopetalous, the *tube* gibbous on the under ſide, and containing honey; the limb divided into five ſegments, which are blunt and nearly equal; rudiments of Antheræ are viſible within the tube, *fig.* 1.

PISTILLUM: GERMEN placed below the corolla, ovate, flat, grooved, nearly the length of the corolla; STYLE white, ſomewhat thickened near the top, a little longer than the corolla, oblique; STIGMA trifid, *fig.* 6, 7, 8, 9.

SEED of an ovate oblong ſhape, and pale brown colour, a ſingle rib on one ſide, and three on the other, crowned with a feathery down, *fig.* 11, 12, 13.

MALE FLOWER.

CALYX and corolla the ſame as in the female, *fig.* 2.

STAMINA: three FILAMENTS filiform, longer than the corolla: ANTHERÆ white, or pale red, *fig.* 5. an imperfect Piſtillum in the centre of each flower, *fig.* 10.

There are few plants in which nature ſports more than in the Valerians, even out of the *four* ſpecies which we have growing wild with us, *one* is monandrous, viz. the *rubra*, and *another* dioicous, as the preſent. Theſe deficiences in their claſſical character are however the leſs to be lamented, as they furniſh excellent ſpecific diſtinctions.

The *dioica* is found only in wet and boggy ſituations; in the meadows and oſier-grounds about *Batterſea* it grows abundantly; its bloſſoms before they open are of a bright red colour, and being collected into ſmall heads, are very conſpicuous among the herbage in the month of April; in June and July it produces its downy ſeeds, which, for their beauty and ſingular manner of expanding their pappus or down, are highly deſerving the attention of the curious.

The roots having a ſimilar ſmell, and probably the ſame medicinal virtues, as the officinal Valerian, may be ſubſtituted in lieu thereof, if neceſſary.

What SCOPOLI aſſerts of this plant is ſo contrary to the common opinion of Botaniſts and our own obſervations, that we cannot forbear ſubſcribing his own words; they will either prove that his obſervations are not to be depended upon, or that this plant puts on a very different appearance in *Carniola* than it does in the other parts of *Europe*.

"Millena ſpecimina examinavi et nunquam vidi flores dioicos, ſed nunc omnes hermaphroditos, nunc filamento uno aliove caſtrato inſtructos, nunc maſculos et femineos in eadem planta, ita tamen ut maſculi flores continerent rudimentum germinis et ſtyli; ſine ſeminibus vero perfectis nullam hactenus inveni plantam."

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Valeriana dioica.

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CAREX RIPARIA. GREAT or COMMON CAREX.

CAREX *Lin. Gen Pl.* MONOECIA TRIANDRIA.

MASC. Amentum imbricatum. *Cal.* 1. phyllus. *Cor.* 0.

FEM. Amentum imbricatum. *Cal.* 1. phyllus. *Cor.* 0. *Nectarium* inflatum, 3. dentatum. *Stigm.* 3.

SEM. Triquetrum, intra nectarium.

Raii Synop. Gen. 28. HERBÆ GRAMINIFOLIÆ NON CULMIFERÆ FLORE IMPERFECTO SEU STAMINEO.

CAREX *riparia* ſpicis maſculis pluribus triquetris nigricantibus, acutis, ſquamis ariſtato acuminatis, capſulis ſubinflatis, bicornibus.

CAREX *acuta* ſpicis maſculis pluribus, femineis ſubpedunculatis, erectis, capſulis ovato-lanceolatis ariſtato-acuminatis furcatis. *Hudſon Fl. Angl. p.* 413.

CAREX ſpicis maſculis ternis, femineis numeroſis, erectis, breviſſime petiolatis, capſulis bicornibus. *Haller, hiſt. n.* 1404. et forſan 1398 et 1399.

CAREX *acuta*. *Lightfoot Fl. Scot. p.* 565.

GRAMEN cyperoides cum paniculis nigris. *J. B.* 2. 494. *Raii Hiſt.* 1292.

GRAMEN cyperoides latifolium ſpica rufa ſive caule triangulo. *Bauh. Pin.* 6.

GRAMEN cyperoides. *Ger. emac.* 12.

GRAMEN cyperoides majus latifolium. *Park.* 1265. *Raii Syn.* 417. Great vernal Cyperus-graſs.

CYPEROIDES aquaticum, maximum, foliis vix unciam latis, caule exquiſite triangulari, ſpicis habitioribus, erectis, ſquamis in ariſtam longius productis, capſulis oblongis, bifidis. *Michel. Nov. Gen. Tab.* 32. *fig.* 7. et 6.

RADIX perennis, repens.

CULMUS in aquoſis bi ſeu tripedalis, folioſus, nodoſus, ſtriatus, triqueter, angulis acutis, aſperis.

FOLIA ſemunciam lata, glauca, carinata, ad margines carinamque aſpera, vaginantia, vagina una cum inferiore parte folii pulchre reticulata.

SPICÆ maſculæ et femineæ diſtinctæ, *maſculæ*, plerumque, tres, ad quinque, erectæ, nigricantes, triquetræ, acutæ, congeſtæ, bractæatæ, ſuprema biunciali, inferioribus brevioribus inæqualibus, *femineæ* tot quot maſculæ, ovato-acutæ, pedunculatæ, plerumque erectæ, aliquando etiam pendulæ, ſupremis ſeſſilibus, androgynis.

FLOS MASC.

CALYX: *Squamæ* plurimæ, imbricatæ, lanceolatæ, ariſtato-acuminatæ, e nigro purpuraſcentes, *fig.* 1.

STAMINA: FILAMENTA tria, filiformia, alba; ANTHERÆ tenues, luteæ, mucronatæ, *fig.* 2.

FLOS. FEM.

CALYX: *Squamæ* ut in maſc. inferne vero latiores et ſuperne magis luculenter ariſtatæ, ariſtâ ſerrulatâ, *fig.* 3.

NECTARIUM germen continens, ovatum, glabrum, bicorne, *fig.* 4. auct. demum inflatum, acuminatum, ſtriatum, fuſcum. *fig.* 6. magn. natur.

PISTILLUM: GERMEN parvum, ovatum, glabrum, STYLUS filiformis, nudus, nectario paulo longior; STIGMATA tria, villoſa, alba, ſubulata, *fig.* 5. auct.

SEMEN unicum, triquetrum, intra Nectarium, *fig.* 7. mag. nat.

ROOT perennial and creeping.

STALK in wet ſituations two or three feet high, leafy, jointed, ſtriated, the angles ſharp and rough.

LEAVES half an inch broad, glaucous, keeled, the keel as well as the edges rough, ſheathing the ſtalk, the ſheath, together with the lower part of the leaf, beautifully reticulated.

SPIKES of the male and female diſtinct, thoſe of the *male* generally from three to five, upright, blackiſh, three-corned, pointed, cluſtered, and furniſhed with floral leaves, the uppermoſt about two inches in length, the lowermoſt ſhorter and unequal; *female* ſpikes as numerous as thoſe of the *male*, ovate, pointed, ſtanding on foot-ſtalks, generally upright, but ſometimes pendulous, the uppermoſt ſeſſile and androgynous.

MALE FLOWER.

CALYX: *Scales* numerous, imbricated, lanceolate, running out to a long beard-like point, of a purpliſh black colour, *fig.* 1.

STAMINA: three FILAMENTS, thread-ſhaped and white; ANTHERÆ ſlender, yellow and terminated by a ſhort point, *fig.* 2.

FEM. FLOWER.

CALYX: *Scales* as in the male, but broader below, and more evidently bearded above, the awn finely ſawed or toothed, *fig.* 3.

NECTARY: containing the germen, ovate, ſmooth, with two horns, *fig.* 4. magn. finally inflated, pointed, ſtriated, and of a brown colour, *fig.* 6. nat. ſize.

PISTILLUM: GERMEN ſmall, ovate, ſmooth; STYLE filiform, naked, a little longer than the nectary; STIGMATA three, villous, white and tapering, *fig.* 5. magnif.

SEED ſingle, three-cornered, encloſed in the Nectary, *fig.* 7. nat. ſize.

In a former number of this work we gave a figure and deſcription of the *Carex pendula*, one of the largeſt, as well as moſt diſtinct ſpecies of this genus; we here preſent our readers with three more of this numerous and difficult tribe. Our motive for publiſhing them in the ſame number is, that they may the more readily be compared together, and their ſeveral diſtinguiſhing characters be more forcibly impreſſed.

In herborizing it is a practice with me to endeavour at acquiring a perfect knowledge of every plant which occurs in all its poſſible varieties; the greater the difficulty I find in the attempt, the more minute is my inquiry. Theſe inveſtigations have to my great ſatisfaction often terminated in ſome new diſcovery, which has placed the plant in a more conſpicuous light than before; ſuch has been the happy reſult in the preſent inſtance. In paſſing thro' *Batterſea* meadows I had frequently noticed the three Carices here figured, which I was taught to conſider as the ſame ſpecies, varying only from particular circumſtances; but ſo great was the variation, that I never could perfectly reconcile myſelf to the idea. I ſhall here relate the ſeveral characters which ſtruck me firſt, and gave me the idea of their being different. It was the pointed, triangular, black heads or male ſpikes of the *riparia*, the bluntneſs not only of the

Carex Acuta. Acute Carex.

CAREX *acuta* ſpicis maſculis pluribus, obtuſis, ſquamis obtuſiuſculis, caule acutangulo.

CAREX *acuta* ſpicis maſculis pluribus, femineis ſubſeſſilibus, capſulis obtuſiuſculis. *Lin. Syſt. Veg. p.* 706. *Sp. Pl. p.* 1388. *Fl. Suec. n.* 857.

CAREX *glauca Scopoli Fl. Carn. n.* 1157.?

CYPEROIDES foliis Caryophylleis, caule exquiſite triangulari, ſpicis habitioribus, ſquamis curtis, obtuſè mucronatis, capſulis turbinatis, brevibus, confertis. *Michel Nov. Gen. p.* 62. *tab.* 32. *f.* 12.

GRAMEN cyperoides foliis caryophylleis vulgatiſſimum. *Raii Hiſt.* 1292.

CAREX cæſpitoſa var. β. *Lightfoot Fl. Scot.*?

RADIX perennis, repens.

CULMUS in aquoſis, bipedalis et ultra, folioſus, nodoſus, ſtriatus, triqueter, angulis acutis, aſperis.

FOLIA tres lineas lata, glauca, carinata, ad margines carinamque aſpera.

SPICÆ maſculæ et femineæ diſtinctæ, *maſculæ* plerumque tres, erectæ, remotiuſculæ, oblongæ, obtuſæ, e purpuréo-nigræ ſeu fuſcæ, ſuprema ſeſcunciali, inferioribus brevioribus, inæqualibus, bracteatæ, bracteâ inferiore ſpicis breviore: *femineæ* duæ, vel tres, longiores, et graciliores, pedunculatæ, plerumque erectæ, apicibus ſæpe maſculis.

Flos Masc.

SQUAMÆ plurimæ, arcte imbricatæ, ovato-oblongæ, obtuſæ, e fuſco-purpureæ, nervo medio vireſcente, *fig.* 1.

STAMINA: Filamenta tria, filiformia, alba; Antheræ luteæ, *fig.* 2.

Flos. Fem.

SQUAMÆ ovato-acuminatæ, ſuperne ad lentem denticulis ciliatæ, *fig.* 3.

NECTARIUM ovatum, glabrum, ore ſæpius bidentato, *fig.* 4.

PISTILLUM: Germen parvum, intra nectarium; Stylus nectario paulo longior; Stigmata tria, patentia, *fig.* 5.

SEMEN triquetrum, *fig.* 8, 9, intra nectarium bidentatum, *fig.* 6, 7.

ROOT perennial, and creeping.

STALK, in wet ſituations, two feet high, and upwards, leafy, jointed, ſtriated, three-cornered, the angles ſharp, and rough.

LEAVES, three lines in breadth, glaucous, keeled, the edges and keel rough.

SPIKES, male and female, diſtinct; *male* ſpikes generally three, upright, at a little diſtance from each other, oblong, obtuſe, of a purpliſh, black, or brown colour, the uppermoſt an inch and a half in length, the lower ones ſhorter and unequal, furniſhed with floral leaves, of which the lowermoſt is ſhorter than the ſpikes; *female* ſpikes two or three, longer and ſlenderer than the male, ſtanding on footſtalks, for the moſt part upright, the tips frequently male.

Male Flower.

SCALES, numerous, cloſely imbricated, of an ovate oblong ſhape, obtuſe, of a browniſh purple colour, the midrib greeniſh, *fig.* 1.

STAMINA: three Filaments, filiform, and white; Antheræ, yellow, *fig.* 2.

Female Flower.

SCALES ovate, and pointed, the upper part when magnified edged with fine teeth, *fig.* 3.

NECTARY ovate, ſmooth, the mouth moſt commonly having two teeth, *fig.* 4.

PISTILLUM: Germen ſmall, within the nectary; Style a little longer than the nectary; Stigmata three, ſpreading, *fig.* 5.

SEED three-cornered, *fig.* 8, 9, contained within a nectary having two teeth, *fig.* 6. 7.

the ſpikes themſelves, but of the ſcales compoſing the male ſpikes of the *acuta*, and the narrow leaves and ſlender appearance of the ſpikes in the *gracilis*, joined to the want of that glaucous hue in the leaves, ſo conſpicuous in thoſe of the two former; impreſſed with theſe general appearances, I carried home their roots, and planted them in my garden, and found, at the expiration of two years, that they ſtill kept up the ſame appearances. I then attended more minutely to their parts of fructification, and found ſufficient to convince me, and I truſt every unprejudiced perſon, that they are three ſpecies immutably diſtinct.

The largeſt and perhaps the moſt generally common of the three is our *riparia*, which we have diſtinguiſhed by that name, from its being found on the edges of rivers; it will alſo grow in the middle of a ditch or pond, and, if ſuffered to increaſe, will quickly fill up any piece of water, being in this reſpect almoſt equal to the *Poa aquatica*, and *Typha latifolia*; it alſo, by means of its powerfully creeping roots, eaſily makes its way through any mooriſh ground, and hence is often found in meadows themſelves; and, though much ſmaller in ſuch ſituations, its ſtriking characters are equally diſtinct. Where it grows luxuriantly, its ſpikes, eſpecially the lowermoſt of the female ones, frequently become branched, which gives them a very outrè appearance, that may puzzle for a moment: as the male ſpikes on their firſt appearance are ſo eaſily diſtinguiſhed by their pointed and angular appearance, ſo the female ſpikes, when nearly ripe, are diſtinguiſhed from the two others by having large, ſomewhat inflated, and pointed capſules, ſlightly bifid at the extremity.

The ſynonyms of this and the two other ſpecies are ſo confounded together, that to trace them through all the writers that have written on the ſubject, would be an endleſs taſk; it will be ſufficient therefore to have quoted a few which may be depended on.

The *acuta* is next in ſize, at leaſt with reſpect to the breadth of its leaves, to the *riparia*, and is found in ſituations exactly ſimilar; indeed they very frequently grow together, and, from the great ſimilarity of their foliage, may eaſily be confounded: when young, the bluntneſs of its male ſpikes and obtuſeneſs of their ſquamæ, ſo as totally to want any kind of ariſta, invariably diſtinguiſhes it from the *riparia*; and though there is frequently a tendency in theſe ſpikes to be three-cornered, yet the angles are always very obtuſe, to which we may add, that the colour of them before the antheræ come forth is much brighter, and ſometimes a ſpike is found perfectly brilliant: the female ſpikes, as well as thoſe of the male, are fewer in number, as well as ſmaller; nor have they that tendency to be pendulous which thoſe of the *riparia* frequently have, the capſules when ripe are alſo much ſmaller, more numerous, and no ways inflated, but very ſimilar to thoſe of the *gracilis*; we may further remark, that while the ſquamæ in the male ſpikes before the burſting forth of the antheræ are invariably obtuſe, thoſe of the female ſpikes are pointed, and that while this plant in its ſtrong ſtate may eaſily be miſtaken for the *riparia*; in its weak ſtate, it approaches very near the *recurva*, which alſo is a ſpecies perfectly diſtinct.

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Carex acuta.

Carex gracilis.

CAREX GRACILIS. SLENDER SPIKED CAREX.

CAREX *gracilis* ſpicis maſculis et femineis pluribus, ſubfiliformibus, floribus digynis.

CAREX nigra verna vulgaris. *Lin. Fl. Lap.* 330. ?

CYPEROIDES anguſtifolium, caule exquiſite triangulari, aſpero, ſpicis floriferis prælongis, tenuioribus, ſeminalibus autem ſpicis biuncialibus, et habitioribus, erectis, ſquamis, brevibus acutis, capſulis ſpadiceo viridibus, rhomboideis, ſubtriquetris. *Micheli Nov. Gen. p.* 60. *n.* 40.

GRAMEN cyperoides majus anguſtifolium. *Park.* 1265. *Raii Hiſt.* 1293. *Syn. p.* 417, *n.* 2. Great narrow-leaved vernal Cyperus-graſs.

RADIX perennis, repens.	ROOT perennial and creeping.
CULMUS in aquoſis bi ſeu tripedalis, in pratis humilior, folioſus, nodoſus, triqueter, angulis acutis, aſperrimis.	STALK, in watery ſituations two or three feet high, in meadows not ſo tall, leafy, jointed, three-cornered, the angles ſharp and very rough to the touch.
FOLIA *radicalia* longa, viridia, vix glauca, lineas duas lata, ad margines et carinam aſpera, vaginantia, *bractæalia* lineam cum dimidia lata, inferiore (florente planta) ſpicis longiore.	LEAVES from the *root* long, of a green colour, ſcarcely glaucous, two lines in breadth, on the edges and midrib rough, ſheathing the ſtalk, *bracteal* leaves a line and a half in breadth, the lowermoſt, while the plant is in flower, longer than the ſpikes.
SPICÆ maſculæ et femineæ diſtinctæ, maſculæ plerumque tres, e fuſco nigricantes, graciles, obſolete triquetræ, nutantes, terminalis biuncialis, inferior duplo aut triplo brevior, infima ſæpius androgyna, longior, femineæ tres aut quatuor, teretes, graciles, longitudine maſculi terminalis, ſeſſiles ſeu breviter pedunculatæ, ſuberecti, nigricantes.	SPIKES, both male and female, growing diſtinctly, the *male* generally three in number, of a browniſh black colour, ſlender, faintly three-cornered, drooping, the terminal ſpike about two inches in length, the next below twice or thrice as ſhort, the lowermoſt for the moſt part androgynous and longer, *female* three or four, round, ſlender, length of the terminal male ſpike, ſeſſile or ſtanding on ſhort footſtalks, nearly upright and blackiſh.
MAS.	MALE.
SQUAMÆ ovato-acutæ, arcte imbricatæ, carinatæ, e purpureo nigricantes, carina ſubviridi, *fig.* 1. auct.	SCALES ovate, pointed, lying cloſely one over another, keeled, of purpliſh black colour, the keel greeniſh, *fig.* 1. *magnif.*
STAMINA: FILAMENTA tria, capillaria, alba; ANTHERÆ lineares, flavæ, *fig.* 2.	STAMINA: three FILAMENTS, ſlender and white; ANTHERÆ linear and yellow, *fig.* 2.
FÆM.	FEMALE.
SQUAMÆ maſ. ſimiles, magis vero oblongæ ac obtuſæ, *fig.* 3.	SCALES as in the male, but more oblong and blunter, *fig.* 3.
NECTARIUM oblongum, glabrum, ore integro; GERMEN minimum; STYLUS nectario longior; STIGMATA duo, villoſa, *fig.* 4. 5.	NECTARY oblong, ſmooth, the mouth entire; GERMEN very ſmall; STYLE longer than the Nectary; STIGMATA, two, villous, *fig.* 4, 5.
SEMEN triquetrum, minimum, intra nectarium, *fig.* 6.	SEED, three-cornered, very minute, within the nectary, *fig.* 6.

If the ſeaſon be mild, this plant and the *riparia* flower in April, and ripen their ſeeds in June and July.

The *gracilis*, though a ſlenderer plant both in ſtalks, leaves, and ſpikes, is equal in height where it grows in ſimilar ſituations to either of the other two; but as this has a greater tendency, at leaſt in Batterſea Meadows to grow among the herbage, it is frequently found ſhorter, and ſometimes large patches of its foliage are viſible without any flowering ſpikes.

This ſpecies is diſtinguiſhed from the other two, not only by having narrower leaves, which want the glaucous colour of the other two, and ſlenderer ſpikes, which in their young ſtate are remarkably pendulous, ſo as at firſt ſight to give this plant an appearance of the *Carex pendula*, but the female flowers are conſtantly and invariably digynous. My moſt obliging friend Dr. GOODENOUGH, to whom I had communicated my thoughts on this ſubject, examining theſe plants with his uſual accuracy, anticipated me in the diſcovery of this moſt important, moſt neceſſary character; a character which in a moment decidedly diſtinguiſhes betwixt two plants, which without it would for ever have been liable to be confounded.

We ſhould have been inclined to ſuppoſe that our *gracilis* was the *acuta* of LINNÆUS, had he not quoted MICHELI's figure, to which he adds the epithet *bona;* that figure is a tolerable repreſentation of our *acuta*, but the ſpikes are far too thick for thoſe of the *gracilis*.

This ſpecies, which is equally common with the two others, flowers a week or two later.

Agriculturally conſidered, it is perhaps doubtful, whether we are to rank the Carices with the uſeful or the noxious plants; from what we have hitherto obſerved, we ſhould rather claſs them with the latter, not but we think the *Junci, Scirpi,* &c. infinitely more injurious, yet ſtill they occupy the room of better graſſes; their principal merit is, that they afford early paſturage, yet their foliage is harſh and rough, and productive of indifferent hay; and ſuch is the opinion of LINNÆUS, who, in his *Flora Lapon.* remarks, that the huſbandman is not fond of ſuch meadows as are over-run with Carices, as they afford bad fodder and unprofitable paſturage "nec pingueſcat bos *carice paſtus acuta;*" unfortunately, however, when the preſent ſpecies, or ſuch as have ſimilar creeping roots, have once got poſſeſſion of the ſoil, they are the moſt difficult plants poſſible to eradicate.

As articles of rural œconomy, they are in many inſtances highly uſeful: in Hampſhire, Surrey, and, perhaps, other hop counties, the leaves of theſe three ſpecies are uſed indiſcriminately under the name of *Sedge*, for tying the young hop plants to the poles. MICHELI informs us, that in Italy they are uſed to cover their wine flaſks, to make the common ſort of chair bottoms, and that the Coopers in making tubs, &c. place them betwixt the ſtaves to make them water-tight: to the comfort of the Laplander, they contribute in a high

degree,

degree, by defending him from the ſeverity of the weather; this is ſo particularly deſcribed by LINNÆUS in his *Flora Lapon.* that we ſhall tranſlate it for ſuch of our readers as may not have an opportunity of conſulting the original, now become very ſcarce:

“ Thou wilt wonder, perhaps, curious reader, in what manner human beings are capable of preſerving life
“ during the intenſe ſeverity of a winter's froſt in Lapland, a part of the world deſerted on the approach of
“ winter by almoſt every kind of bird and beaſt.
“ The inhabitants of this inhoſpitable climate are obliged to wander with their Rhendeer flocks continually
“ in the woods; not only in the day-time, but through the longeſt winter nights, their cattle are never houſed,
“ nor do they eat any other food than Liverwort; hence the herdſmen, to ſecure them from wild beaſts,
“ and other accidents, are of neceſſity kept perpetually with them. The darkneſs of their nights is in a great
“ degree overcome and rendered more tolerable by the light of the ſtars reflected from the ſnow, and the
“ Aurora Borealis, which in a thouſand fantaſtic forms nightly illumines their hemiſphere. The cold is
“ intenſe, ſufficient to frighten and drive us foreigners from their happy woods. No part of our bodies are
“ ſo liable to be deſtroyed by cold as the extremities, which are ſituated fartheſt from the heart; the chilblains
“ of the hands and feet, ſo frequent with us in Sweden, ſufficiently indicate this. In no part of Lapland
“ do we find the inhabitants affected with chilblains, though in reſpect to country one would expect them to
“ be peculiarly ſubject to this diſeaſe, eſpecially as they wear no ſtockings, while we clothe ourſelves in one,
“ two, and even three pair.
“ A Laplander preſerves himſelf from the violence of cold in the following manner: he wears breeches,
“ or rather trowſers, made of the rough ſkin of the Rhendeer, which reach to his ancles, and ſhoes made of the
“ ſame material, the hair turned outward; this graſs, cut down in the ſummer, dried, rubbed betwixt the
“ hands, and afterwards combed or carded, he puts into his ſhoes, ſo as not only wholly to enwrap his feet,
“ but the lower part of his legs alſo, which, thus defended, never ſuffer from the ſevereſt cold; with this
“ graſs he alſo fills his hairy gloves to preſerve his hands, and thus are thoſe hardy people enabled to bear
“ the froſt.
“ As this graſs in the winter drives away cold, ſo in the ſummer it checks the perſpiration of the feet,
“ and preſerves them from being injured by ſtones, &c. in travelling, for their ſhoes are extremely thin,
“ being made of untanned ſkins. It is difficult to learn, on inquiry, what the particular ſpecies of graſs is
“ which is thus in requeſt with theſe people, as ſome uſe one ſort, ſome another. It is, however, always ſome
“ ſpecies of Carex, and we underſtood chiefly this.”

It is no leſs difficult to underſtand what ſpecies LINNÆUS himſelf means: he quotes *Moriſon's* figure, which is our *ſylvatica;* yet ſays, that the Carex grows in *paludibus limo plenis,* which that plant never does with us, it is moſt likely, in our opinion, to be one or all of the three common ſpecies here figured.

SCUTELLARIA MINOR. SMALL HOODED-WILLOW HERB.

SCUTELLARIA *Lin. Gen. Pl.* Didynamia gymnospermia.

Calyx ore integro: poſt floreſcentiam clauſo, operculato.

Raii Syn. Gen. 14. Suffrutices et herbæ verticillatæ.

SCUTELLARIA *minor* foliis cordato-ovatis ſubintegerrimis, floribus axillaribus. *Lin. Syſt. Vegetab.* p. 457. *Sp. Plant.* p. 835.

CASSIDA paluſtris minima flore purpuraſcente. *Tourn. Hiſt.* p. 410.

LYSIMACHIA galericulata minor. *Raii Hiſt.* 572. *Syn.* 244. The leſſer-hooded Looſeſtriſe.

GRATIOLA latifolia. *Gerard. emac.* 585.

GRATIOLA latifolia ſeu noſtras minor *Parkins.* 221. *Hudſon. Fl. Angl. ed.* 2. p. 265. *Lightfoot Fl. Scot.* p. 320.

RADIX perennis, repens, alba.	ROOT perennial, creeping, and white.
CAULIS erectus, palmaris, ſeſquipalmaris, et ultra, ſimplex, ſeu ramoſus, in horto ramoſiſſimus evadit, tetragonus, rigidulus, ſubhirſutus, baſi purpuraſcens.	STALK upright, a hand's breadth, ſix inches, or more in height, ſimple or branched, in the garden becoming very much ſo, four-cornered, ſomewhat rigid and hirſute, purpliſh at the baſe.
FOLIA oppoſita, ſubſecunda, breviſſime petiolata, cordato-ovata, obtuſa, ſubintegerrima, in opacis glabra, in apricis hirſuta, et ſubinde rubentia.	LEAVES oppoſite, with a tendency to grow one way, ſtanding on very ſhort foot-ſtalks, heart-ſhaped, ovate, obtuſe, almoſt entire on the edges, in ſhady ſituations ſmooth, in expoſed ones hirſute, and ſometimes reddiſh.
FLORES parvi, carnei, axillares, bini, pedunculati, pedunculis calyce longioribus.	FLOWERS ſmall, of a pale red colour, growing by pairs in the alæ of the leaves, ſtanding on foot-ſtalks longer than the calyx.
CALYX: Perianthium monophyllum, breviſſimum, hirſutum, ore bilabiato, integro, ſquamula incumbente operculi inſtar clauſili. *fig.* 1.	CALYX: a Perianthium of one leaf, very ſhort, hirſute, the mouth compoſed of two lips and entire, with a ſmall ſcale like a lid reſting on it. *fig.* 1.
COROLLA monopetala, ringens, labium ſuperius trifidum, ſuperne villoſum, laciniis ſubæqualibus, intermedia concavâ emarginatâ, lateralibus remotiuſculis, nec intermediæ ſubjectis ſicut in galericulata. *fig.* 2. inferius latius, emarginatum, punctis et lineolis rubris pulchre variegatum. *fig.* 3.	COROLLA monopetalous, and ringent, the upper lip trifid, and villous above, the ſegments nearly equal, the intermediate one hollow and nicked, the ſide ones ſomewhat diſtant from each other, not placed under the intermediate one as in the galericulata. *fig.* 2. the lower lip broader, with a ſingle notch, and prettily variegated with red lines and dots. *fig.* 3.
STAMINA: Filamenta quatuor, alba, ſub labio ſuperiore recondita, quorum duo longiora. Antheræ minimæ, albæ, ad lentem hirſutulæ. *fig.* 4.	STAMINA: four Filaments, of a white colour, hid under the upper lip, two of which are longer than the other two. Antheræ very minute, white, and ſlightly hirſute, when magnified. *fig.* 4.
PISTILLUM: Germen quadripartitum. Stylus albus, longitudine ſtaminum, ſuperne paululum incraſſatus. Stigma ſimplex, incurvatum, acuminatum. *fig.* 5.	PISTILLUM: Germen divided into four parts. Style white, the length of the ſtamina, thickened a little above. Stigma ſimple, a little hooked, and pointed. *fig.* 5.
PERICARPIUM nullum, calyx continens	SEED-VESSEL none, the calyx containing four ſeeds.
SEMINA quatuor, ſubrotunda, ad lentem aſpera. *fig.* 6.	SEEDS of a roundiſh ſhape, appearing rough when magnified. *fig.* 6.
NECTARIUM glandula aurantiaca ad baſin germinis. *fig.* 7.	NECTARY: an orange-coloured gland at the baſe of the germen. *fig.* 7.

Gerard, our countryman, appears to have been the diſcoverer of this ſpecies, to which he gives the names of *Gratiola latifolia.* Parkinson, who conſidered it as a plant peculiar to this country, adds to them the epithet of *noſtras.* Tournefort, afterwards enumerating the plants growing about *Paris*, mentions it as growing with them in ſeveral places; nevertheleſs it is not common throughout Europe. Indeed Linnæus, in his *Species Plantarum*, expreſsly ſays, *habitat in Anglia.* Gerard's referring a plant to another genus, ſo obviouſly ſimilar in its parts of fructification to what was then called *Lyſimachia galericulata* ſhews, that little attention was paid to thoſe parts at that time; nor was he very fortunate in applying to the leaves of ſo ſmall a plant the name of *latifolia.*

Had Linnæus frequently ſeen and cultivated this plant, as we have had opportunity of doing, he would have expreſſed no doubt of its being too nearly related to the *galericulata* and *haſtifolia.* Vid. *Spec. Plant.*

In the time of old Gerard, this ſpecies was found on *Hampſtead Heath*, and on ſome of the boggy parts of that Heath it ſtill exiſts; but is more plentifully met with in ſimilar ſituations, on *Putney* and *Shirley* Commons.

It flowers in July, Auguſt, and September. On *Shirley* Common we have ſeen it much larger than the ſpecimen figured; and this ſummer found a ſingle plant which had blue flowers.

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Scutellaria minor.

PEPLIS PORTULA. WATER PURSLANE.

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Peplis Portula.

PEPLIS PORTULA. WATER PURSLANE.

PEPLIS *Lin. Gen. Pl.* HEXANDRIA MONOGYNIA.

Perianth. campanulatum: ore 12-fido. *Petala* 6, calyci inſerta. *Capſ.* 2-locularis.

Raii Syn. Gen. 25. HERBÆ HEXAPETALÆ ET POLYPETALÆ VASCULIFERÆ.

PEPLIS *Portula* floribus apetalis. *Lin. Syſt. Vegetab.* p. 283. *Sp. Pl.* p. 474. *Fl. Suec.* n. 311.

PEPLIS petalis ſenis, ſæpiſſime apetala. *Haller. Hiſt.* n. 856.

ALSINE paluſtris minor ſerpyllifolia. *Bauh. pin.* 120.

ANAGALLIS Serpyllifolia aquatica. *J. B.* III. p. 372.

GLAUX aquatica folio ſubrotundo. *Loeſel.* p. 106. *ic.* 20.

GLAUX altera ſubrotundo folio. *Boccone* t. 84. *Vaillant. Bot. par.* t. 15. f. 5.

GLAUCOIDES paluſtre portulacæ folio, purpureo flore. *Michel.* p. 21. t. 18.

PORTULA. *Dillen. Nov. Pl. Gen.* p. 133. t. 7.

ALSINE rotundifolia ſ. Portulaca aquatica. *Ger. em.* 614.

ALSINE aquatica minor folio oblongo ſ. Portulaca aquatica. *Park.* 1260. *Raii Syn.* p. 368. Water Purſlane. *Hudſon. Fl. Angl. ed.* p. 147. *Lightfoot Fl. Scot.* p. 187.

RADIX annua, fibroſa.	ROOT annual and fibrous.
CAULIS palmaris et ultra, tetragonus, repens, ramoſus, lævis, rubicundus, geniculatus.	STALK a hand's breadth or more in length, ſquare, creeping, branched, ſmooth and red.
FOLIA oppoſita, ſubrotunda, petiolata, integerrima, glabra, nervo medio rubicundo.	LEAVES oppoſite, roundiſh, ſtanding on foot-ſtalks, perfectly entire, ſmooth and ſhining, the mid-rib reddiſh.
FLORES oppoſiti, axillares, ſeſſiles, minimi.	FLOWERS oppoſite, in the alæ of the leaves, ſeſſile and very ſmall.
CALYX: PERIANTHIUM monophyllum, campanulatum, perſiſtens, maximum, ore duodecimfido, denticulis alternis minoribus, reflexis. *fig.* 1.	CALYX: a PERIANTHIUM of one leaf, bell-ſhaped, permanent, very large (in proportion to the petals), the mouth cut into five ſegments, of which the alternate ones are leaſt and turned back. *fig.* 1.
COROLLA: PETALA raro ſex, ovata, minutiſſima, roſea, calycis fauci inſerta. *fig.* 2.	COROLLA: PETALS ſeldom ſo many as ſix, ovate, very ſmall, roſe-coloured, inſerted into the mouth of the calyx. *fig.* 2.
STAMINA: FILAMENTA ſex, ſubulata, brevia. ANTHERÆ ſubrotundæ. *fig.* 3.	STAMINA: ſix FILAMENTS, tapering and ſhort. ANTHERÆ roundiſh. *fig.* 3.
PISTILLUM: GERMEN ovatum. STYLUS breviſſimus. STIGMA orbiculatum. *fig.* 4.	PISTILLUM: GERMEN ovate. STYLE very ſhort. STIGMA round. *fig.* 4.
PERICARPIUM: CAPSULA ſubrotunda, bilocularis, tenuiſſima, pellucida. *fig.* 5.	SEED-VESSEL: a roundiſh CAPSULE of two cavities, extremely thin and pellucid. *fig.* 5.
SEMINA plurima, minima, albida, angulata. *fig.* 6.	SEEDS numerous, very minute, whitiſh and angular.

The numerous ſynonyms prefixed to the deſcription of this plant ſhew in what a variety of lights it has been viewed by different Botaniſts. Thoſe of early times called it *Alſine*, as they did almoſt every plant whoſe parts of fructification were ſmall, and which bore the moſt diſtant ſimilitude to Chick-weed.

MICHELI and DILLENIUS in their reſpective *Nova Genera* wrought much reformation in theſe minute plants; and if they did not arrive at the ultimatum of deſcription and figure, they paved the way to it.

The *Peplis Portula* is a very common plant in pools of water that are apt to be dried up in the ſummer, particularly on heaths. It flowers from June to Auguſt. Its petals are very minute, and frequently fall ſhort of their proper number.

SCIRPUS MARITIMUS. ROUND-ROOTED OR SEA CLUB-RUSH.

SCIRPUS *Lin. Gen. Pl.* TRIANDRIA MONOGYNIA.

Glumæ paleaceæ, undique imbricatæ. *Cor.* 0. *Sem.* 1 imberbe.

Raii Syn. Gen. 28. HERBÆ GRAMINIFOLIÆ FLORE NON CULMIFERÆ IMPERFECTO SEU STAMINEO.

SCIRPUS *maritimus* culmo triquetro, panicula conglobata foliacea ſpicularum ſquamis trifidis: intermedia ſubulata. *Lin. Syſt. Vegetab.* p. 86. *Sp. Pl.* p. 74. *Fl. Suec.* n. 47.

SCIRPUS *maritimus. Scopoli Fl. Carn.* n. 57.

GRAMEN cyperoides panicula ſparſa majus. *Bauh. pin.* 6.

GRAMEN cyperoides paluſtre panicula ſparſa. *Parkins.* 1266. *Raii Syn.* p. 425. Water or Marſh Cyperus Graſs, with a ſparſed panicle.

CYPERUS rotundus littoreus inodorus. *Lob. ic.* 77. rotundus inodorus Anglicus. *C. B. Pin.* 14. rotundus littoreus. *Ger. em.* 31. *Park.* 1264. *Raii Syn.* p. 426. Round-rooted Baſtard Cyperus. *Hudſon. Fl. Anglic.* p. 21. *Lightfoot Fl. Scot.* p. 89.

RADIX perennis, repens, craſſitie calami ſcriptorii, pallide fuſca, ſtolonibus ſub finem anni apice bulboſis.	ROOT perennial, creeping, the thickneſs of a gooſe-quill, of a pale brown colour, the ſhoots at the end of the year bulbous at their extremities.
CULMUS bi ſeu tripedalis, erectus, folioſus, triqueter, angulis ſubaſperis.	STALK two or three feet high, upright, leafy, three-cornered, the angles ſomewhat rough.
FOLIA plurima, ſeptem ſive octo, pedalia aut ſeſquipedalia, lineas duas lata, ſenſim acuminata, ad carinam et oras vix aſpera, baſi vaginata, vagina minutiſſime ſtriata, nitida.	LEAVES numerous, ſeven or eight, a foot or a foot and a half in length, two lines in breadth, gradually tapering to a point, the keel and edges ſcarcely rough, forming a ſheath at bottom, which is ſtriated and gloſſy.
INVOLUCRUM: folia plerumque duo, rarius tria, inæqualia, longa, ad oras et carinam aſpera.	INVOLUCRUM conſiſts generally of two, rarely of three leaves, which are long, unequal and rough on the edges and keel.
PANICULA terminalis, maxime varia, aliquando enim conſtat ſpiculis quinque vel ſex conglobatis ſeſſilibus, ſæpius vero præter has utrinque oritur pedunculus, tres quatuor vel quinque gerens ſpiculas.	PANICLE terminal, and extremely various, ſometimes it conſiſts of only five or ſix cluſtered ſpiculæ; but for the moſt part, beſides theſe, a flower-ſtalk ariſes on each ſide, bearing three, four, or five ſpiculæ more.
PEDUNCULI glabri, nudi ad ſpiculas ſubincraſſati.	FLOWER-STALKS ſmooth, naked, ſomewhat thickened at the ſpiculæ.
SPICULÆ magnæ, unciales fere, ovatæ; acutæ, primo atro purpureæ, demum ferrugineæ, ſquamis undique imbricatæ.	SPICULÆ large, almoſt an inch in length, ovate, pointed, at firſt of a blackiſh purple colour, afterwards ferruginous, covered with ſcales on every ſide.
CALYX: *Squamæ* fuſcæ, corrugatæ, ſcarioſæ, carinatæ, apice ſæpius tridentatæ, dente medio ſubulato, in infimis floſculis longiore. *fig.* 1. 2.	CALYX: *Scales* brown, wrinkled, ſonorous to the touch, keeled, having the tip generally furniſhed with three teeth, of which the middle one runs out to a long point, in the lowermoſt flowers this is longeſt. *fig.* 1. 2.
COROLLA nulla.	COROLLA wanting.
STAMINA: FILAMENTA tria, alba, latiuſcula. ANTHERÆ, flavæ, lineares, membrana alba minuta terminatæ. *fig.* 3.	STAMINA: three FILAMENTS, white and broadiſh. ANTHERÆ yellow, linear, tipt with a minute white membrane. *fig.* 3.
PISTILLUM: GERMEN obovatum, minimum, glabrum. STYLUS ſubulatus, longitudine ſtaminum. STIGMATA tria, capillaria. *fig.* 4.	PISTILLUM: GERMEN inverſely ovate, very ſmall and ſmooth. STYLE tapering, the length of the ſtamina. STIGMATA three, capillary. *fig.* 4.
VILLI quatuor aut quinque, ad baſin germinis, albi, erecti ad lentem retrorſum aculeati, germini longiores. *fig.* 5.	HAIRS four or five at the baſe of the germen, white, upright, when magnified having prickles which crook backward, longer than the germen. *fig.* 5.
SEMEN unicum, ſubtriquetrum, acuminatum, fuſcum, nitidum. *fig.* 6.	SEED ſingle, ſomewhat three-cornered, pointed, brown, and ſhining. *fig.* 6.

LINNÆUS remarks, that this ſpecies cloaths the ſea-ſhores as the Bulruſh does the borders of the inland lakes; but it is frequently found where the water is not ſalt, as in the river *Thames*, and on the edges of the creeks running from it. In the *Iſle of Shepey* it fills almoſt every ditch, and appears to be more perfectly at home.

It flowers from June to Auguſt.

The older Botaniſts made ſeveral ſpecies of this plant, which LINNÆUS has very properly referred to varieties only. They did not attend to the œconomy of the plant, or they would have found, that the roots, in every variety, were bulbous at the extremities in the autumn, nor to the circumſtances of ſituation, &c. or they would have ſeen this plant ſometimes ſhorter, ſometimes taller, ſometimes with a ſimple, ſometimes with a branched panicle as is repreſented on the plate.

We know of no uſe to which this elegant ſpecies of Club-ruſh is applied. The roots have a remarkably ſweet taſte, and probably are very nutritious.

Swine are extremely fond of the roots of the *Scirpus paluſtris*, which the Swediſh peaſants collect and fodder them with in the winter: the roots of the preſent ſpecies, being much larger, would we conceive be much preferable for this or ſimilar purpoſes.

Scirpus maritimus.

Scabiosa arvensis.

SCABIOSA ARVENSIS. FIELD SCABIOUS.

SCABIOSA *Lin. Gen. Pl.* TETRANDRIA MONOGYNIA.

Cal. communis polyphyllus; *proprius* duplex, ſuperus. *Recept.* paleaceum ſive nudum.

Raii Syn. Gen. 8. HERBÆ FLORE COMPOSITO DISCOIDE, SEMINIBUS PAPPO DESTITUTIS, CORYMBIFERÆ DICTÆ.

SCABIOSA *arvenſis* corollulis quadrifidis radiantibus, foliis pinnatifidis inciſis, caule hiſpido. *Lin. Syſt. Vegetab.* p. 121. *Sp. Plant.* p. 143. *Fl. Suecic.* n. 117.

SCABIOSA foliis petiolatis, ovato-lanceolatis, dentatis, ſuperioribus ſemipinnatis. *Haller. Hiſt.* 206.

SCABIOSA arvenſis. *Scopoli Fl. Carn.* n. 135.

SCABIOSA pratenſis hirſuta quæ officinarum. *Bauh. pin.* 269.

SCABIOSA major vulgaris. *Ger. emac.* 719.

SCABIOSA vulgaris pratenſis. *Parkins.* 484. *Raii Syn.* p. 191. Common Field Scabious. *Hudſon. Fl. Angl. ed. II.* p. 62. *Lightfoot Fl. Scot.* p. 114. *Oeder Fl. Dan.* t. 447.

RADIX perennis, ramoſa, ſublignoſa, difficulter evulſa.

CAULIS pedalis vel ultra, teres, ſimplex ſeu ramoſus, ſcaber, ſuperne nudus, pubeſcens, inferne nigro punctatus, hiſpidus: pilis albidis.

FOLIA oppoſita, hiſpida, acuta, inferiora integra, ovali-oblonga, remote ſerrata; ſuperiora ſeſſilia, amplexicaulia, pinnatifida: laciniis linearibus, oppoſitis, ſubſerratis; intermedia duplo majore, lanceolata, utrinque attenuata, in medio ſerrata.

FLORES terminales, longius pedunculati, ſolitarii.

CALYX *communis* polyphyllus, imbricatus, foliolis ovatis, acutis, pubeſcentibus, ciliatis, plano-patentibus; interioribus paulo minoribus.

COROLLA compoſita hemiſphærica, dilute violacea, radiata; *propria radii* tubulata, longitudine calycis, intus villoſa, quadrifida; laciniis erectis, oblongis, obtuſis, inæqualibus; exteriore paullo majore; duabus lateralibus, oppoſitis, æqualibus; intima duplo minore, *fig.* 1.; *diſci* minor, ore quadrifido, obtuſo, inæquali.

STAMINA: FILAMENTA quatuor, ſetacea, tubo corollæ inferne adnata, longitudine corollæ; ANTHERÆ exſtantes, lineares, incumbentes, corollæ concolores. *fig.* 2.

PISTILLUM: GERMEN inferum, tetragonum, villoſo-hiſpidum, coronatum *pappo* campanulato, villoſo-ſetaceo, cinereo. STYLUS cylindricus, ſuperne incraſſatus, corolla longior, erectus. STIGMA exſertum, clavatum, emarginatum. *fig.* 3.

RECEPTACULUM barbatum, pilis germinibus brevioribus.

SEMEN villoſum, ſubtetragonum, pappo villoſo-ſetaceo coronatum. *fig.* 4.

ROOT perennial, branched, ſomewhat woody, with difficulty pulled up.

STALK a foot or more in height, round, ſimple or branched, rough, above naked of leaves, and downy below, dotted with black and hiſpid: the hairs whitiſh.

LEAVES oppoſite, hiſpid, pointed; the lower ones entire, of an oval oblong ſhape, remotely ſerrated; the upper ones ſeſſile, embracing the ſtalk, and pinnatifid; the ſegments linear, oppoſite, ſlightly ſerrated, the middle ſegment twice the ſize of the others, lanceolate, tapering at each extremity, and ſerrated in the middle.

FLOWERS terminal, ſtanding on long foot-ſtalks.

CALYX *common to all the florets* compoſed of many leaves, imbricated, the leaves ovate, pointed, downy, edged with hairs, flat and ſpreading; the innermoſt ſomewhat the ſmalleſt.

COROLLA compound, hemiſpherical, of a pale violet colour, radiate; the florets in the *circumference* tubular, the length of the calyx, villous within, divided into four ſegments which are upright, oblong, obtuſe and unequal; the outermoſt ſomewhat the largeſt; the two ſide ones oppoſite, and equal; the innermoſt twice as ſmall, *fig.* 1.; the *central florets* ſmaller, the mouth divided into four, obtuſe, unequal ſegments.

STAMINA: FILAMENTS four, tapering, growing to the lower part of the tube of the corolla, and of the ſame length as the corolla. ANTHERÆ projecting, linear, incumbent, of the ſame colour as the corolla. *fig.* 2.

PISTILLUM: GERMEN below the corolla, four-cornered, covered with numerous ſtiffiſh hairs and crowned with a bell-ſhaped *pappus* formed of numerous aſh-coloured briſtles. STYLE cylindrical, thickened above, longer than the corolla, upright. STIGMA projecting, club-ſhaped, with a notch. *fig.* 3.

RECEPTACLE bearded, the hairs ſhorter than the germina.

SEED villous, ſomewhat four-cornered, crowned with a briſtly villous down or pappus. *fig.* 4.

The *Scabioſa arvenſis* is a very common plant, both in Corn-fields and Meadows. In the former it is undoubtedly a troubleſome weed; in the latter it frequently forms a great part of the paſturage, and being a hardy plant, producing a large quantity of foliage, which is not refuſed, according to LINNÆUS's experiments by *Kine*, *Horſes*, or *Sheep*, it may perhaps be conſidered rather as uſeful.

Dr. RUTTY, in his Materia Medica, remarks, that the leaves have ſometimes been deſcribed as inodorous and inſipid; but, on a more accurate examination, they are found to be bitteriſh, with ſome degree of acrimony and aſtringency. Medicinally this ſpecies, as well as the *ſuccisa*, has been recommended internally in Coughs, Aſthmas, malignant Fevers, Lues venerea, Epilepſy, &c.; and externally in the Scurvy, Itch, Scabies, Tetters, &c.; and may be uſed in ſubſtance, infuſion, decoction, or any manner of way; but, as Dr. LEWIS obſerves, the preſent practice has little dependance on it.

It flowers in July and Auguſt, varies much in the diviſions of its leaves, and is ſometimes found with white flowers. The bloſſoms, and indeed the whole plant is much larger than the *Scabioſa ſuccisa*; its leaves are more jagged. It flowers much earlier, and it affects a drier ſituation.

EQUISETUM ARVENSE. CORN HORSE-TAIL.

EQUISETUM *Lin. Gen. Pl.* CRYPTOGAMIA FILICES.
Spica fructificationibus peltatis, baſi dehiſcentibus, multivalvi.
Raii Syn. Gen. 4. HERBÆ CAPILLARES ET AFFINES.

EQUISETUM *arvenſe* ſcapo fructificante nudo; ſterili frondoſo. *Lin. Syſt. Vegetab.* p. 457. *Sp. Pl.* p. 1516. *Fl. Suec.* n. 928.

EQUISETUM caule florigero nudo, ſterili verticillato, radiorum duodecim. *Haller. Hiſt.* n. 1676.

EQUISETUM *arvenſe. Scopoli Fl. Carn.* n. 1253.

EQUISETUM arvenſe longioribus ſetis. *Bauh. Pin.* 16. *Parkins.* 1202. *Raii Hiſt.* p. 130. Corn Horſe-tail.

EQUISETUM ſegetale. *Ger. emac.* 1114.

HIPPURIS minor cum flore. *Dod. Pempt.* p. 73.

EQUISETUM minus terreſtre. *I. B.* III. 730. *Hudſon. Fl. Angl. ed.* 2. p. 265. *Lightfoot Fl. Scot.* p. 647.

RADIX perennis, gracilis, nigra, articulata, inſigniter reptans, fibris nigricantibus e geniculis exortis capillata.	ROOT perennial, ſlender, black, jointed, exceedingly creeping, with tufts of black fibres ſpringing from the joints.
SCAPI ſeminiferi ante caules frondoſos prodeuntes, et cito marceſcentes, craſſitie culmi triticei majoris, palmares aut dodrantales, erecti, nudi, luteſcentes, geniculati, geniculis 2. 3. 5. vaginis multifidis, nervoſis, membranaceis, circumveſtiti.	STALKS producing the ſeeds ſpringing up before the leaf-ſtalks, and ſoon withering, the thickneſs of a large wheat-ſtraw, a hand's-breadth or more in height, upright, naked, yellowiſh, jointed; joints from two to five, covered with membranous, ribbed ſheaths, divided at top into numerous ſegments or teeth.
SPICÆ ſeminiferæ terminales, oblongæ, obtuſæ, unciales.	SEED-SPIKES terminal, oblong, obtuſe, about an inch in length.
CAPSULÆ ſeu thecæ ſeminiferæ plurimæ, angulatæ, erectæ, circa receptaculum proprium collocatæ, et ſcuto orbiculato luteſcente tectæ, *fig.* 1. demum introrſum dehiſcentes et pulverem vireſcentem effundentes, *fig.* 2. 3. auct. *fig.* 4.	CAPSULES, or ſeed-caſes, numerous, angular, upright, placed together round a partial receptacle, and covered with a yellowiſh orbicular ſhield, *fig.* 1. finally opening inwardly, and throwing out a greeniſh powder, *fig.* 2. 3. magnified, *fig.* 4.
CAULIS pedalis et ultra, in apricis obliquus, ſtriatus, ſcabriuſculus, geniculatus. *Vaginæ* numeroſæ, denticulatæ.	STALK a foot or more in height, in open ſituations oblique, ſtriated, roughiſh, jointed. The *Sheaths* numerous and toothed.
FOLIA verticillata, octo circiter in ſingulo verticillo, ſimplices, cauli ſimplices.	LEAVES whirled, about eight in each whirl, ſimple, and like the ſtalk.

Experiment and obſervation, which have diſcovered perfect ſeeds, if not real Stamina and Piſtilla, in ſome of the plants of this hidden claſs, have hitherto failed in aſcertaining what the powder is, which is contained in ſuch abundance in the ſpikes of the Horſe-tail, different Botaniſts differing widely in their opinions concerning it. LINNÆUS and SCOPOLI conſider it as the true ſeed of the plant: HALLER and ADANSON as the male duſt; and ſo ſtrongly was the laſt mentioned author of this opinion, that he removed it from the cryptogamous plants, and placed it with the family of the pines, from which, however, as SCOPOLI very judiciouſly obſerves, it differs *toto cœlo*.

We ſat down to examine the fructification of this plant, in full expectation of finding Pollen not Seed contained in its cells. We conceived, *a priori*, that a ſubſtance ſo delicately formed, and ſo rapid in its growth, could ſcarcely produce capſules with ripe ſeeds; but we roſe from our examination in the full belief of the powders being the real ſeed, ſo far as we could judge from its ſtructure and œconomy: actual vegetation muſt however be proved, before we can arrive at certainty in this matter.

If a little of the powder be ſhaken out of the ſpike on a piece of white paper, a moderate magnifier diſcovers a motion in it, eſpecially if it be breathed on. A ſimilar motion is obſerved in the capſules of the Ferns when they throw out their ſeeds; and in the fine powder contained in the heads of the Jungermannia, if we apply a very conſiderable magnifier to this powder, we find its motion ariſe from a very different principle from that which actuated the two former. Here every particle of the powder has three or four, very rarely five, fine, pellucid threads, which are club-ſhaped at the extremity. Theſe threads are elaſtic, and, by variouſly extending and curling themſelves up, occaſion the motion which is ſo perceptible. Monſ. ADANSON, who has minutely deſcribed this ſeed as pollen, compares the appearance it ſometimes aſſumes to a ſpider with its legs ſtretched out. Although theſe motions, which are extremely ſingular and diverting, are plainly ſeen with a good magnifier, we never could diſcover the body of the ſeed to make any ſort of exploſion as Pollen would, under ſimilar circumſtances of expoſure.

The proper time to examine this curious phenomenon is in April, when the plant produces its ſpikes.

The medicinal virtues of the Equiſetum are too problematical to deſerve notice. Writers on the *Materia Medica* rank it with the aſtringents.

The Farmer is deeply intereſted in a knowledge of this plant, as it is not only one of the moſt troubleſome and difficult weeds to extirpate that we are acquainted with, but noxious even to cattle, eſpecially kine. HALLER relates a particular caſe in which it proved fatal to a young heifer, by bringing on an incurable *Diarrhœa*.

Many parts of *Batterſea Fields* exhibit this plant in perfection. It ſometimes is found in meadows and under hedges; and, according to its ſituation, like all other plants, aſſumes a variety of appearances.

Equisetum arvense

Hippuris vulgaris.

HIPPURIS VULGARIS. MARES-TAIL.

HIPPURIS *Lin. Gen. Pl.* MONANDRIA MONOGYNIA.

Cal. 0. *Petala* 0. *Stigma* ſimplex. *Sem.* 1.

Raii Syn. Gen. 5. HERBÆ FLORE IMPERFECTO SEU STAMINEO VEL APETALO POTIUS.

HIPPURIS *vulgaris. Lin. Syſt. Vegetab.* p. 51. *Sp. Pl.* p. 6. *Fl. Suec.* n. 2.

PINASTELLA. *Dillen. Nov. Gen.* p. 168.

LIMNOPEUCE. *Haller. Hiſt.* p. 264. *Vaillant. Mem. de l'Acad. anno* 1716, t. 1. f. 3.

POLYGONUM fæmina. *Matth. in Dioſc.* p. 952. *Dodon. Pempt.* p. 113.

EQUISETUM paluſtre brevioribus foliis polyſpermon. *C. B. pin.* 15.

EQUISETUM paluſtre alterum brevioribus ſetis. *Park.* 1200.

CAUDA EQUINA fæmina. *Ger. emac.* 1114. *Raii Syn.* p. 136. *Hudſon. Fl. Angl. ed.* 2. p. 2. *Lightfoot Fl. Scot.* p. 70.

RADIX perennis, repens, geniculata, alba, geniculis plurimis fibris capillata.	ROOT perennial, creeping, jointed and white, the joints furniſhed with numerous capillary fibres.
CAULES plurimi, ſeſquipedales et ultra, erecti, ſimplices, glabri, ſtriati, teretes, ſpongioſi, *fig.* 1. medulla filiformi, compacta, in radicibus tenaci.	STALKS numerous, a foot and a half or more in height, upright, ſimple, ſmooth, ſtriated, round, ſpongy, *fig.* 1. the pith like a thread in the center, compact, and in the roots tough.
FOLIA verticillata, octo circiter, brevia, linearia, glaberrima, avenia, ad lentem punctata, punctis excavatis.	LEAVES growing in whirls, about eight in number ſhort, linear, perfectly ſmooth, without veins, dotted when magnified, the dots appearing hollow.
FLORES hermaphroditi plerumque, preſertim vere, ad finem æſtatis plures fæmineos obſervavi, axillares, ſeſſiles.	FLOWERS for the moſt part hermaphrodite, eſpecially in the ſpring, at the cloſe of the ſummer I have obſerved many of them to be female, growing in the alæ af the leaves, and ſeſſile.
CALYX nullus.	CALYX none.
COROLLA nulla.	COROLLA none.
STAMEN: FILAMENTUM unicum, apici germinis inſidens, primo breviſſimum, demiſſo polline longitudine piſtilli. ANTHERA biloba, purpuraſcens, majuſcula, *fig.* 2, 3.	STAMEN: a ſingle FILAMENT, ſitting on the top of the germen, at firſt very ſhort, on ſhedding the pollen becoming as long as the piſtillum. ANTHERA compoſed of two lobes, purpliſh and rather large, *fig.* 2, 3.
PISTILLUM: GERMEN oblongum. STYLUS breviſſimus, nudus. STIGMA ſubulatum, album, ad lentem villoſum, *fig.* 4, 5, 6.	PISTILLUM: GERMEN oblong. STYLE very ſhort, naked. STIGMA tapering to a point, white and downy when magnified, *fig.* 4, 5, 6.
PERICARPIUM nullum.	SEED-VESSEL none.
SEMEN unicum, oblongum, nudum, ſuboſſeum, intus album, medio fuſcum, membranâ ſeu arillo tenui obtectum, *fig.* 7, 8, 9.	SEED ſingle, oblong, naked, hard, white within, and in the center brown, covered with a thin membrane or arillus, *fig.* 7, 8, 9.

Greater ſimplicity in the conſtruction of a flower can ſcarcely exiſt than in the *Hippuris.* Here we have neither calyx, corolla, nor ſeed-veſſel; and thoſe parts which are univerſally conſidered as eſſential to the fructification are in the preſent inſtance as few as poſſible, there being only one ſtamen, with its correſponding piſtillum, yet perfect ſeed, and that in conſiderable quantity, is produced.

The *Hippuris* here deſcribed, which takes its name from the Greek Ἱππȣ̃ρις, ſive *Cauda equina*, is not the *Hippuris* of the firſt Botaniſts. They applied the term to our *Equiſetum*, the *Hippuris* of LINNÆUS is the *Polygonum fæmina* of DIOSCORIDES, and arranged by his commentator MATTHIOLUS with our *Polygonum aviculare* and *Herniaria.* Succeeding Botaniſts imagining, from the growth of its leaves, or from its producing ſeed, that it had better pretenſions to be ranked with the *Equiſetum*, abſurdly enough called it *Cauda equina fæmina*, to which Mr. HUDSON could not well avoid giving the Engliſh name of *Mares-tail.*

Although common in many parts of *Great Britain*, this plant is very rare about *London*, Mr. HUDSON mentions it as growing in a part of the New River near *Hornſey*, where it may ſtill be found.

It flowers and produces its ſeeds from *June* to *Auguſt.*

In running ſtreams it is frequently extended to a great length; and we have been informed, that in ſome rivers it is an exceedingly troubleſome weed, which we can the more readily believe, having experienced its roots to be of the moſt powerfully creeping kind.

A tranſverſe ſection of its ſtalk is a beautiful microſcopic object.

On examining this plant we have ſometimes found its flowers to be female only.

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